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THEORY OF DISEASE;

BASED UPON THE PRINCIPLE THAT MAN IS A COM-POUND ELECTRICAL MAGNET.

ALSO, O

A NEW METHOD OF CURE,

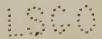
BY MEANS OF THE VARIOUS QUALITIES OF ELECTRICITY.



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PREFACE.

The numerous applications which have been made to the author, from various sources; and believing such a work was needed at the present day; hoping, and trusting that it might render material aid, to the candid inquirer after truth and facts, in this most useful and interesting department of seience; are among the inducements, which have prompted him to offer the present work to the public. But chiefly, the work is designed as a practical guide, and reference to those who have been, and may hereafter, become his pupils. Although it is not intended to exclude any, and every one, who may be disposed to investigate this important subject, yet, it cannot be expected to be as useful in the hands of such, as though they had been regular pupils, and attended upon the author's lectures, and oral instruction. The work contains the fundamental principles, of the author's new theory, and practice of disease; yet many illustrations, occular demonstrations, &c., which are used in the lecture room, before the class, are necessarily omitted; as the lecture-room is really, the only place where they can be fully and clearly understood; hence, although we trust the work may prove useful to all, who will give it an impartial perusal, yet it will be doubly so, to his students; to whom it is most respectfully dedicated. Many works have been written, and some really scientific ones, on the wonderful and mysterious agent electricity. History informs us, that Thales, a eelebrated Greeian, of the city of Miletus in Iona, who lived six hundred years before the Christian era, and who was the contemporary of Pythagaras, was the first discoverer of this agent, in a substance called Amber. Theophratus, who lived two or three centuries after, discovered that the same agent existed in Tourmaline. From this period, onward about two thousand years, no farther discoveries of any considerable importance were made in this direction. In 1600, Dr. Gilbert, physician to King James I, ascertained that Diamonds, Saphirs, Carbuneles, Iris, Opals, Amethysts, Beryl, Crystal, Bristol Stone, Rock Alum, common Glass, and Stibium, or Glass of Antimony, &c., have the power when excited,

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to attract light bodies. Towards the close of the sixteenth century, Otto Guericke made the first full and satisfactory discovery, of electric repulsion. Mr. Boyle, Otto Guericke and Dr. Trall, discovered the electric light, at about the same time. Sir Isaac Newtown discovered that, both attraction and repulsion, will penetrate through glass. Nearly a century since, Mr. Wesley declared concerning electricity: "It is a thousand remedies in one." To Dr. Franklin, the celebrated electrician of our own country, is due the discovery of bringing this agent from the thunder cloud, to the earth, by means of his famous kite. Not only have many books on the subject of electricity been written, but many, also, on the medical uses of it; as for instance, as early as 1744, M. Kratzenstein, wrote on the treatment of disease by means of electricity. Soon after, M. Jallabert, Dr. Mandnit, and the Abbi Sans, M. Cavallo, and Mr. Adams, published works on the subject. About the beginning of the present century, we find works by Gale, M. Sigand de la Fond, Dr. Althous; and later still, M. Nobili, Stunheil, Middeldorpff, Sarlandiere, Amussatt, &c. In 1760, we find the following from the pen of Mr. Wesley: "The Desideratum; or Electricity made plain and useful, by a lover of mankind and of common sense. Speaking of the use of electricity in disease he says: "It is absolutely certain, that in many, very many, cases it never fails. If there could be anything in nature as an absolute panacca, electricity would bid fairer for it than anything in the world; upon the whole we may pronounce it the desideratum, the general and rarely failing remedy, in nervous cases of every kind, (palsies excepted,) as well as in many others. What if the nervous juice itself be a fluid of this kind? If so, it is no wonder, that it has always cluded the search of the most accurate naturalists." Mr. Lovett thought the electrical method of treating disease, could not be expected to arrive at any considerable degree of perfection, till administered by the faculty. Upon which Mr. W. replies, "Nay then, quanta de spe decidi! All my hopes are at an end. For when will it be administered by them? Truly, ad graecas, calendas. (Never.) Not till the faculty have more regard to the interest of their neighbors, than their own; at least, not till there are no apothecaries in the land, or till physicians are independent of them. Therefore, without waiting for what probably never will be, and what, indeed we have no reason to expect. let men of sense do the best they can for themselves, as well as for

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their poor, siek, helpless neighbors. How many they relieve from racking pain or pinching sickness, by this inexpensive and speedy remedy! restoring them to ease and health, generally in a few minutes, frequently in a moment! And if a few of these lovers of mankind, who have some little knowledge of the animal economy, would only be diligent in making experiments, and communicate them to each other, that each might profit thereby; I doubt not but more nervous disorders would be cured in one year, by this single remedy, than the whole English Materia Medica will cure by the end of the ecntury. I only wish some would consider it more deeply, and write a full practical treatise on electricity, which might be a blessing to many generations."-Wesley's Journal, Vol. 7, pp. 539. More recently, works have been written by our own countrymen as, Channing, Smith, Flemming, Paige, Garratt, etc., on the medical uses of electricity, all of which contain more or less good saggestions and ideas; but as all, we think, have failed in the most important part, viz: to lay down and establish a clear, rational, and scientific theory, upon which the practice is based, hence, leave the application a mere matter of uncertain experiment with the reader, as it seems to have been with the writer; and as the attention of the people seems to be more engrossed in relation to this subject than ever, and deeming it to be of the greatest importance at this early stage of investigation, to give to the reader, a reliable, philosophical basis or theory; (Dr. Garratt's declaration notwithstanding to the contrary,) where he says on page 4th of his work, "Success in practice, not theory, is our aim," upon which to predicate his practice; deeming no practice safe and reliable, which is not based upon sound universal laws; are reasons also, which have induced the author to present this work to the public. He has often been asked whether he is the discoverer of the theory which he teaches, where he got it, &c., and as Dr. Paige and Prof. Bell's names have been mentioned sometimes in this connection, he therefore takes this opportunity to say, that he has read Dr. Paiges lectures thoroughly and earcfully; and that some years since, Prof. Bolles was associated with him in electropathic practice for some time, during which time he became perfectly familiar with his views; and that he wholly dissents from the views of both these gentlemen, or from any, and all who have yet written on the subject. Hence the subject matter herein contained, with a few exceptions, which are duly acknowledged, are in part, the result of his own personal research and experimentation during a series of near twenty years; and he alone is responsible for the truth, or error taught. Let it not be supposed, that in offering this work to the public, the author designs it to wholly obviate the necessity, of even resorting to the medical profession for advice or assistance; for the arts of Surgery, and Midwifery, have always been in vogue, and we know of no good reason why they will not continue, and as long as they do, the services of the profession will be required.

We are frequently asked, whether we expect to take people without a medical education, and in one or two courses of lectures, qualify them to treat disease safely. We answer, not only with safety, but success too. We can refer to hundreds of examples in proof of this; therefore, what has been done often, we believe can be done again. Nevertheless, we are not to be understood by this, that we would in the least discountenance a thorough knowledge of Anatomy and Physiology; and to those of our students who design entering upon the practice as a profession or business, we say; such knowledge is indispensable to complete success.

We have aimed in this humble effort, to present to the reader something New, Important, and True; and tried to present it in as clear and intelligible a manner as possible. That it has faults in style, expression, &c., we doubt not, but the author would say, without vanity or egotism, that, losing sight of its faults, he believes it contains truth enough, (not contained clsewhere,) to justify its publication; clse he would never allow it to appear before the public; and hence, we respectfully ask the reader, to give it a thorough, careful, and candid perusal; and if faults it has in style, remember it is much easier to read a book, than to write one; and if it contains errors in theory, then manly and fairly meet those errors, and give us a theory that has none; remembering that truth can never be frowned into falsehood.

In conclusion we would say, we are sometimes found fault with by our brethren in the medical profession, on the score of putting our instructions within the reach of those disconnected with the profession, or in not confining it to the latter. Our answer to this objection is: As a general thing they treat it as they have treated nearly every other valuable improvement, when first introduced; with indifference and neglect, and in every possible manner endeavor to prevent their patrons from investigating it. I am proud to say, however, that there are very many honorable exceptions; as we searcely have a class, but the profes-

sion are represented. Therefore we consider it but fair and honorable, if the faculty will not accept it, to give it to the community at large; our motto being, "The greatest good to the greatest number."

W. R. WELLS.



LECTURE FIRST.

Ladies and Gentlemen:-

As the subject, this evening, contains principles of vital importance, the comprehension of which is absolutely necessary to a thorough and clear understanding of the course—I therefore solicit your careful and undivided attention. My object during the course is not to tickle your fancy, excite the mirthful or arouse the marvelous merely, but to deal with sober, solid facts, facts which pertain to your interest as well as mine—yea, the interest of the entire race.

Much has been said and written on the subject of Electricity, as a remedial agent, by the learned and scientific of this and other countries, and much use has been made of electricity by physicians of all schools; but, as we think, all have failed, in a great measure, to understand certain fundamental, grand laws which universally govern it, in its application to the human system, both in health and disease; hence, we are at no loss to understand why the practical results have in so large a propor-

must lead to an error in practice. Our object in the present course, is to give you as thorough a knowledge of both the fundamental laws that govern electricity in its application to the system, the practical workings of these laws, and also the electrical relations and polarity of the human system in its normal or natural state, as time or circumstances will permit. Inasmuch as many of the members of this class (and the same is true of all my classes) have not had the benefits of a medical education, I shall therefore avoid the use of technicalities, and endeavor to use language readily understood by all.

MAN A COMPOUND ELECTRICAL BEING.

Man has two entities, mind and matter: The former invisible, imponderable, immaterial; the latter visible, ponderable, material. The former governs the latter, by both its voluntary and involuntary powers. As the body has no inherent power to move itself, or produce any change in itself; and yet, as it is subject to changes, as in diseased structure, also is constantly undergoing change in position—to what source therefore are we to look for a rational explanation of this fact? I answer—to mind, in both its voluntary and involuntary powers on the body, through the medium electricity. To illustrate the truth of our premises; a dead man cannot

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Page 15, 2d and 6th lines from top, for hydrogen read mirrogen.

15, last line, for veins read vessels.

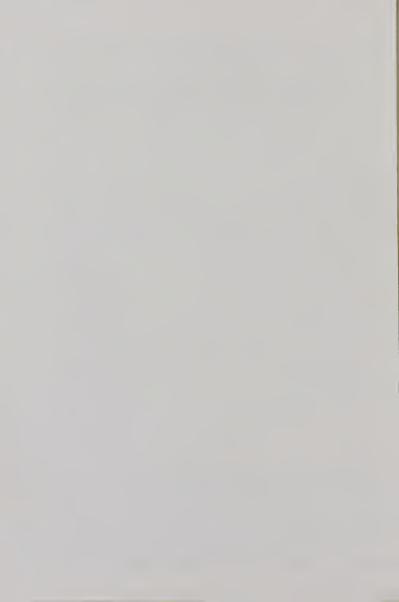
17,9th line from the bottom, semi-colon between attract; the

19, 4th line from the bottom, for of electricity, read or electricity.

33, 3d line from top, for maintain read obtain, and 8th line from top leave out the tence, coming from the fine wire or external helix: also, 8th line from the bottom, after tal P, read to S.

ige 49, 9th line from bottom, for part, read post. 52, 9th line form top, for hand, read head.

- 55, 12th line from bottom, for applications, raed appellations 64, 2d line from bottom, for external, read internal.
- 71, 8th line from bottom, between you be, read would. 73, 6th line from top, for must, read meant to.
- \$2, 3d line from top, for extremo read externus.
- 82, 4th line from bottom, for largugeal, read laryngeal. 94, 4th line from bottom, for spherical, read special.
- 99, 3d line from bottom, for sinews, read sinuses. 102, 7th line from bottom, for cantery, read cantery.
- 103, 4th line from top, instead of means this world, read means in this world.
 142, after E. Andrews, M. D., read and 47 others.
- " 144, at the close of the notice entitled Electropathy, read Syracuse Daily Journal,



move or stir-why? Simply because gross, ponderable matter, in itself considered, possesses not the principle of motion, as we shall show more fully elsewhere. The mind governs the body, as we have said, by both its voluntary and involuntary powers, and this is done, not by direct contact of the two, (as mind is too fine and immaterial to come in direct contact with so gross a species of matter as the physical body,) but by and through another element holding a medium relation between the two, and that element is electricity, or the nervous fluid. This agent seems to be eminently fitted for the position assigned it by the great Architect, as it is the finest and most subtle of all matter of which we can form any idea -hence through it, the mind can reach and govern the body.

The two brains are the fountain or electrical reservoir of the physical system, in which the electricity may be said to be stored up for the supply of the system. The cerebrum or large brain, occupying about four-fifths of the entire cavity of the skull, situated in the anterosuperior portion of the head, is the seat of the voluntary powers of the mind; and the cerebellum, situated in the posterior and inferior portion of the head, is the seat of the involutary powers.

These, with the medula-oblongata and medulaspinalis, are the great centers of the nervous system, and

from these centers, directly and indirectly, spring millions of nervous branches; so that the nervous system, as a whole, is a complete net-work, a pefect congeries, insomuch that the point of the finest cambric needle cannot enter the soft parts of the system anywhere (when healthy) without producing pain, and no pain would be experienced without puncturing a nerve. Each separate nerve, however small or apparently unimportant, is a perfect electrical magnet, and when in health, representing the two, that is, the positive and negative forces of electricity alike, or in equilibrium. Through these nerves the electricity passes through the fountain or brain to all the vicera, organs, muscles, and every portion of the system, for the purpose of supplying it with that element, without which not one of its various and important functions could be performed.

We are told by physiologists that the heart circulates the blood, the stomach digests the food, etc.; but we ignore the doctrine, and conceive it to be logically unsound—else, why does not the heart of a dead man throb and circulate the blood, as well as that of the living? There is manifestly a principle existing in the living that enables these organs to perform their functions, not found in the dead, and we do well to carefully study and if possible ascertain what that principle is. Why then, cannot the heart of a dead man act as well as that of a

live one? Because in the dead man the union of the two entities (mind and matter) is broken, and the monarch, or moving, controlling principle, mind, has taken its departure—and now, all that is left is the gross, ponderable material entity, leaving the body a unit, to be controlled by the same law that controls all inanimate matter, viz: the law of inertia.

The involuntary powers of the mind, acting through the cerebellum of the brain, send on through the appropriate nerves that element which causes the heart to throb, pulsate and move its contents; and through other nerves or channels, send the same element to the stomach, thereby enabling it to perform the functions of digestion, and through another channel supply the liver, &c., each organ of the body being supplied from the same great source through their appropriate nerves, with the same common agent, electricity, or nervo-vital fluid, thereby enabling each of them to perform their appropriate function. While the mind, by its involuntary powers, is thus providing electricity for all the internal organs of the body; by its voluntary powers acting through the cerebrum and its appropriate nerves, it is supplying the same element for the purpose of maintaining animal life and voluntary motion.

We are now brought to the following question. If the brain is the great electrical reservoir of the physical system, and furnishes electricity to it in all its various departments, from whence is it supplied? In answering this important question, we shall take up the philosophy of the circulation of the blood. In discussing this deeply interesting portion of our subject, I must in the first place beg leave to differ somewhat from the learned and standard authors, who have written on the circulation. I cannot believe the heart, weighing only about eight to ten ounces, can exert a force equal to twenty-five or fifty tons, as taught by some writers. This is shere nonsense, and too preposterous to merit a moment's consideration at the bar of reason or candor. Neither do I conceive it to act on the hydraulic or hydrostatic principle; but I do believe we have a more rational, common sense and consistent theory by which to account for its functions, and that is, upon electrical principles. And here we take occasion to acknowledge the assistance we have received on this point from Dr. J. B. Dodds, whose views on this subject more fully correspond with our own, than those of any author who has written upon it.

We find this universal law prevails in electricity, to wit: two bodies possessing like electrical polarity, repel each other; but having an opposite or dissimilar polarity, they attract each other. Now let us bear in mind the fact that this law is universal. The atmosphere which we breathe is composed of two gasses—one of

which, the oxygen, being electrically positive, and the other, hydrogen, electrically negative-by virtue of this law they are held together, and combined in atmospheric relation. In the act of inspiration the oxygen is retained, or separated by the lungs from the nitrogen, and transmitted to the venus or negative blood, while the hydrogen is expelled from the lungs in the condition of carbonic-acid gas, it being negative, and hence unfit for the purposes of life. The venus blood possessing a negative electrical polarity, and the electricity of the oxygen possessing a positive electrical polarity—now then, the law of unlikes steps in and unites them, and at the same instant changes the electrical polarity of the venus blood from negative to positive, also from venus to arterial blood, from a dark purple hue to a bright cherry color. The lungs being always uniformly in health, in a positive electrical condition, hence, by virtue of the law, likes repel, the blood must, in obedience to the law, be repelled and driven from the positive lungs, immediately after being put in the same electrical polarity with them -and it is thus driven, not conveyed merely, as physiologists tell us, but upon electrical principles, repelled from the great magnet, to wit: the lungs, they having the same polarity with itself, and through the pulmonary veins, (and here I object to the term veins, as arterial blood is always found in these veins; therefore they

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are arteries and not veins.) The newly made arterial blood is driven by the positive lungs to the left auriele of the heart, from thence to the left vertricle, or large chamber of the heart.

At this point let us pause, and ask—why does the positive arterial blood leave this chamber? Physiologists and anatomists tell us, because the muscles of the ventricle contract upon it with the power of fifty or a hundred thousand pounds, and by this means forces the blood from this chamber. I grant that were this the case, it would be reason enough for the blood leaving; but I utterly deny the premises, as too ridiculous to be believed for a moment. But we think a more rational explanation is, the blood leaves this ventricle upon the same principle, and by the same power, that it did the lungs a moment previous, to wit: upon the principle that like polarities repel; and the lungs being a much larger and stronger positive magnet than the blood, and the blood yet being found within the electrical range or influence of the lungs—therefore, the blood must either leave, or the lungs must; or the law has failed, and hence is not universal and reliable. Now, as none are disposed to doubt the validity and stability of the law, we think they are forced to the conclusion that this, to say the least, is a plausible and common sense explanation hence we hold that they are by the principles of honor bound to either adopt it or give us a better one.

The blood is repelled, (upon the principles laid down) from the left vertiele of the heart, into the great aorta, or large artery of the eireulating system, and through it and its numerous branches and ramifications, is thrown to all portions of the system. After performing its zigzag journey through the arterial system, and accomplishing its design, or the purpose of the great Master-builder, in the animal economy, (which design we shall soon endeavor to show,) it is then received into the capillary vessels, and from thence to the veins, and finally back to the right portions of the heart and lungs. Now, as the blood loses all its positive electricity which it gained in the lungs, while accomplishing its journey through the arteries, and having lost the electricity gained in the lungs, how, or by what principle, is it returned to the heart and lungs? We answer; upon the principle of the universal law-"unlikes attract." Two bodies having a dissimilar electrical polarity, attract the larger and fixed body, always attracting the lesser and movable one.

As soon as the blood has entered the vein, its polarity is changed from positive to negative, and therefore the lungs always remaining positive, and being the great fixed magnet, hence the venus blood being the lesser movable negative magnet, must be attracted to them, and not they to it. After arriving in its journey as far as the right ventricle of the heart, we ask again, why does it

not remain there, inasmuch as the muscular structure of this ventricle is not near as powerful as that of the left? We answer, most emphatically, because of the strong electrical attraction that the lungs exert upon it, and for no other reason. Now, we promised to show one of the objects, and we think altogether the most important one, of the circulation, viz: that of furnishing and supplying the brain and whole system with the vitalizing element electricity, which we contend it does, in the following manner. In explaining the circulation, you will bear in mind I told you that the arterial blood, in its transmission through the arterial system, lost the electricity it gained in the lungs, but did not tell you what became of it, which I will now do.

We find, on examining the body after death, that the great Master-builder has carefully provided a nerve for each artery, and most skilfully and with the utmost precision placed them in juxtaposition with each other; but not so with the veins—we often find them unaccompanied by a nerve. I ask, would it not be well for the medical man in his post-mortem examinations, to pause at this point and solve the problem? Ask himself the question, why did the Creator make the distinction? or in other words, so uniformly place a nerve by an artery, and not so uniformly by a vein? For you may be assured, however imperfect man's skill and works may be, those

of the Almighty are always perfect and right. Do not pass over this lightly, and treat it as a small thing, and not worthy of your earnest attention. Be assured of this, however small a matter this may be in your estimation, it contained magnitude and majesty enough to engross the skill and wisdom of Deity. And let me say to my brethren in the profession, (as some of them are members of this, and I am happy to say, of nearly all my classes,) that our patrons, yea the masses, are beginning to enquire for the reason of this, and to them, many other strange and mysterious facts. And I contend that they have an undoubted right to ask, yes, and demand of us satisfactory explanations. I rejoice that the time is coming and now is, when the people are not to be satisfied with light and superficial explanations on these abstruce subjects. Vastly better for the world, had they long ere this waked up to this subject. Then true science and knowledge would have been more thoroughly understood and taught.

But trusting you will pardon me for this digression, I will pursue the subject. Let us bear in mind the fact, that the nerve is expressly designed and arranged for the transmission of the nervo-vital fluid of electricity. Now, do you not perceive, that where there is a nerve, there is prima facia evidence of the existence of electricity near it? Now then, as the arterial blood contains this element,

and is constantly giving it off in its passage through the artery, therefore we see the absolute necessity of a proper conductor to receive it; and as the venous blood has no electricity to impart, hence there is no such necessity for an electrical conductor, or nerves, to accompany it. The nerves which accompany the arteries are involuntary; that is to say, not under the control of the will, and have their origin in the cerebellum, or involuntary portion of the brain.

The electricity that is being given off by the arterial blood in its passage through the artery, is taken up by induction on these nerves, and conveyed to the cerebellum or small brain, that standing in a negative electrical relation to these nerves, but in a positive relation to the cerebrum or large brain; also to all the vicera organs of the body.

I wish you now to distinctly understand and remember another universal law of electric action, viz: When you close a circuit of electricity upon any object, the current uniformly passes in one direction, to wit: from the positive to the negative electrode; hence the positive gives off, and the negative receives the current. Do not forget this principle. The electricity thus received by the cerebellum, is (a portion of it) sent on to the cerebrum, and from thence to be distributed or appropriated by the great monarch on his throne, or the voluntary mind,

to the minutest portions of his realm. In other words, for the purpose of carrying on the functions of animal life and voluntary motion, another portion of which is retained by the cerebellum, and appropriated to the various organs of the body, for the purpose of enabling them to perform *their* functions.

Hence we see the manner in which the great fountain, or brain, is supplied with electricity; and also, the very important relation the lungs hold in the animal economy, viz: that of connecting man with the external world.

We will now briefly call your attention to the cause of disease, and its philosophy:—

Medical men, generally, suppose that there are many causes for the various diseases in existence, and that one disease may have various causes in nature to produce it. But we contend that there is but one grand cause for all disease, and this is, a loss of balance of the two forces of electricity in the part or parts diseased; and as this is the cause of all the convulsions and operations in nature, the same is true of the human system, where disease always begins in the finest, invisible, and ends in the grossest parts. We are aware that physicians make great account of feeling the pulse and looking at the tongues of their patients, and then assume an air of dignity and wisdom, as though by this means they under-

stood all that is important or material to know in the case; when the facts are, (I trust my brethren will pardon me for the acknowledgement,) they are profoundly ignorant, having never been taught any reliable means for accurately diagnosing, and consequently possessing none, they, wishing to disguise this fact, appear to be wonderfully wise and far-seeing. They might, with about as much certainty, (had they only been so taught,) reversed the order—feel of the tongue, and look at the rist or foot—to ascertain the true condition of the patient. We say, had they only the sanction of the schools, the latter method would afford as true an index to what exists within, as the former. After thus examining the patient, they pronounce the disease to be in the liver, lungs, heart, or stomach, as the case may be, and prescribe their gross, ponderable drugs to cure. Now, ladies and gentlemen, we are dealing with sober facts, with truth, and, as in the language of one, "we should care not whither we are led, if she only is our leader." What then are the facts in the case? Let us ever keep in mind this universal law which the Almighty has stamped on matter, viz: gross, ponderable matter has no inherent power to move or change itself. Now bear in mind, that the law of one particle of gross matter, is the law of all particles and species.

A bar of iron cannot transform itself into a lump of

ice. Why? Because the law by which it is controlled, (viz: the law of inertia,) forbids such change; but the bar of iron may, and does, undergo change and decay, because it is acted upon by a higher and more subtle element than itself. So the lungs, liver, heart, stomach, and all the material, ponderable parts of our being, are governed by the same law; hence they cannot disease themselves, or effect any change in themselves, simply because they are controlled by the same law of inertia; and yet that they do become changed or diseased, is a fact which cannot be denied. Now, the important question for us to undestand is; by what means do they become thus changed or diseased? We contend that there can be but one philosophical answer, and that is, in the same manner that all species of gross, ponderable, inert matter is changed; by being acted upon by that agent or element of our being, holding a higher position than any or all of the gross, ponderable, material parts of the body, and yet standing the next step below mind, thereby being emphatically the connecting link between mind and matter; and this element is none other than the electronervous fluid, or electricity. This element, as we have before said, is transmitted to all portions of the physical system, for the express purpose of enabling them to perform their legitimate functions. Now, when the organ or part to which this current is sent, is in perfect health,

the current is balanced, or represents the two forces, positive and negative, alike; but when these forces have lost their balance, too much or too little being received by the organ or part, the result is, its healthy action is interrupted, and disease is the final result. Hence we see the physical body can no more disease or change itself, than can the ocean produce a boisterous and tumultuous condition of its waters. They are both acted upon and controlled by the same law of inertia, and would forever remain at rest unless acted upon by a higher power.

We come now to consider the rationale of cure: And here we remark, there is one principle in the treatment of disease upon which all physicians agree, and that is, to remove the cause of the disease they are called upon to treat. Having found the cause to exist in the electricity of the part or organ, would it be rational or politic to go to work at the organ with crude, ponderable means? All unite with one accord in saying, remove the cause. But how is this to be done? We answer; not by bolus, powder, the lancet, or the use of any such carnal weapons; but by a proper understanding and use of that subtle, unseen, all-powerful agent, electricity.

When our Lord, accompanied by his disciples, on one occasion was overtaken by a boisterous sea, the waves dashing and tumbling, insomuch that the disciples were

afraid of perishing, did the Master take gross, ponderable weapons, and fall to battling the water? Nay, verily! but perfectly understanding the law which he had established, he spoke to the electricity, balanced the two forces—in other words, directed his attention to the cause of the tumult, removed that, and the result was, there was a great calm. Again, what would you think, to see your neighbors in the midst of a sweeping hurricane or tornado, out with their scoop-shovels, brooms and crowbars, undertaking to subdue the elements by the use of such means? You would say they were proper subjects for the madhouse. You would at once declare, their weapons are not appropriate to the element with which they have to contend; and yet you turn, peradventure, from this scene disgusted, pass into your domicil and undertake to do the same thing with the furious tornado raging in the form of fever, or inflammation, and threatening to destroy one of its precious inmates. I grant you may not use the identical weapons your neighbor is using outside; but, nevertheless, you are using similar ones, and they are crude, ponderable, gross weapons, in the form of drugs and medicines. Now let us be consistent, and look calmly at facts. We see at a single glance, that the tornado will not cease its work of destruction until the electricity in the atmosphere is balanced, its positive and negative forces restored again to

equilibrium; exactly the same with that raging within. Restore the lost balance of the two forces of electricity, then you may look for peace and a calm, and not until then. "Oh! consistency, thou art a jewel!"

LECTURE SECOND.

Ladies and Gentlemen:-

In the previous lecture we argued the *triunity* of man, or endeavored to show that he was compound in his nature, composed of three distinct principles, viz: *mind*, *electricity*, and gross, ponderable *matter*.

We also showed that mind was infinitely superior to, and controlled, by both its voluntary and involuntary powers, the body; and, because it does not come in direct contact with the body, it therefore uses the electricity as its agent, through which to execute its mandates; thereby showing the important relation that electricity holds in the economy of man. We also showed the modus-operandi by which the brain is supplied with

electricity; and finally, that when the positive and negative forces of electricity in the human system have lost their balance, disease is the unavoidable result; and that all who attempt to use this agent in the cure of disease, should understand the great fundamental laws by which it is governed; also the electrical condition of the human system, both in health and in disease.

We come now to speak, first, of the electrical polarity of the human system, in its normal or healthy condition, and the law of polarity of electricity when applied to bodies.

The brain and spinal marrow are the center of the nervous system, and from these spring directly and indirectly, millions of branches. Now, bear in mind that each nerve is a perfect magnet, and represents a current of electricity, having, in health, the positive and negative forces thereof balanced, or in equilibrium.

The passage of electricity in the nerves, in its normal condition, is always uniform, moving in the same direction, viz: from the origin to the termination. The law of electrical polarity is this: Whenever you pass a current of electricity through a body, (no matter how long or how short that body may be,) it has an inward and an outward course; inward first, from the point of entrance to the galvanic center; or just one-half the whole distance it has to pass; and outward, from the

galvanic center to the point of exit; hence every current has two ends, an inward and an outward. The inward end is always negative, and the outward always positive.

You will recollect I told you in the previous lecture, that in order to obtain a current of electricity, you must close a circuit upon the object through which you wish to pass the current; and this is to be done by using both electrodes, (the positive and negative,) as these represent the two ends of the current. You might apply two positives to the object, or two negatives, and you would obtain no current—and why? Simply because you have not closed a circuit. But why have you not closed a cireuit? Because you have used but one end of the current. To illustrate: Put your machine in action, attach the electrodes, one to each terminal post of the helix. Now grasp one, and you get no current. Well, drop that. Now grasp the other, you still obtain no current. Why? Because you hold only one end of the current at the same time. Now grasp both electrodes, (one in each hand,) and you at once perceive that the current is passing. Why? Because, you are now in contact with both ends of the current. Hence, you perceive every current has two ends, and also, that both are required in order to obtain an electrical effect.

You must also keep in mind the fact, that when you have closed your circuit upon an object, and consequently your current is passing, that it is governed by an immutable law in its course; and that is, (as I have before remarked,) from the positive to the negative electrode; and not from the negative to the positive; hence, just one-half of the object through which the current passes, becomes electrically negative, and the other half electrically positive, these terms being used relatively. That half appearing between the positive electrode and the galvanic center, is negative, being the inward, and the half between the galvanic center and negative electrode, becomes positive, being the outward end of the current.

As the sun is the positive electrode to all the planets in the solar system, and is furnishing them with electricity, thereby enabling them to perform their respective revolutions with accuracy and precision; so the brain is, in like manner, the positive pole of the human system; hence the direction of the current is *from* the brain downward, in the normal condition. The *first* half of every nerve (in health) is electrically negative; because the current is *inward*, and the *last* half is electrically positive, because the current is *outward*.

EXPLANATION OF MACHINERY.

We come now to speak of the galvanic battery; the principle of its action; also of the primary and secondary, (or induced,) helix current; how obtained, &c. In order to construct a galvanic battery we use two metals, they possessing an opposite electrical relation to each other, in harmony with the law of opposites, or unlike polarities attract. The metals in most common use, are zinc and copper. These, when acted upon, are known to be widely dissimilar in their electrical condition, the zine being highly positive, and the copper negative. These cups are arranged as follows: The zinc cup is suspended within the copper cup, upon the edge of which it is made to hang by means of non-conducting, or wooden ears. It is thus arranged in order that no metallic contact shall take place between the metals, in which ease no action would be produced outside of the cups, in consequence of the circuit being closed in the metals.

After thus adjusting the cups, you are to fill the copper cup nearly full, with a saturated solution of the sulphate of copper, or blue vitriol, made as follows. To one-fourth of a pound of the salt, add two quarts of rainwater. Immediately on filling the copper cup with this solution the action commences—electricity is being elicited or called out of the zinc cup, which cup contained it in a latent state. Now, by resorting to the universal law, unlikes attract, we are thus furnished with an explanation of the phenomenon witnessed. The zinc, you

will bear in mind, is the positive, and the copper the negative metal. The solution is also negative, holding a like polarity with the copper, but unlike with the zinc. Now, the law again ;—likes repel, and unlikes attract; hence we see the action must be between the zinc cup and the solution; and inasmuch as we have brought both ends of the current in contact, we have thereby closed the circuit, and hence must obtain a current, the course of which is from the positive zinc, through the negative solution, to the negative copper. The action in this case is as follows: The zinc is oxidized by the oxygen of the water; the oxyde combines with the acid of the salt, forming sulphate of zine, which remains in solution; while the oxyde of copper, which was previously combined with the acid, being set free, partly adheres to the surface of the zinc cup, or falls to the bottom of the solution as a black powder, and partly is reduced to metallic copper, which is precipitated on the surface of the copper cup, or falls to the bottom in fine grains. This reduction of the oxyde to the metallic state takes place in the following manner. The water of the solution furnishes oxygen to the zinc, and thus enables it to combine with the acid, while the hydrogen, which is liberated, again forms water with the oxygen of the oxyde of copper, with which it comes in contact, leaving the metal free. Hence but little gas is given off during the action of a

battery charged by sulphate of copper, as the hydrogen, which usually escapes, is in this case mostly absorbed. Now, the electricity thus manufactured, is denominated battery current, chemical electricity, or galvanism, from Galvan, its discoverer, and is to be used in a certain class of disease in preference to any other kind, as we shall show when we come to speak of treatment. When the case in hand requires more current than can be obtained by a single pair, you can increase the number of pairs to any given amount required, simply by connecting each pair by means of copper-wire; and here I would remark, the connecting wire should be of large size, in order that it may convey all the electricity generated. There are two methods of connecting your series; one is, by connecting the zinc of one pair to the copper of the next; the other is, by connecting all the zines together, and all the coppers together. The results obtained by these two modes of connection are entirely unlike, e.g.: By the former method the current possesses the power of decomposing and recomposing substances interposed within its passage; whereas by the latter method the current posseses more heating and magnetic properties. The helix is a coiled wire, through which we, often, pass the current from the cups, or battery, before it comes in contact with the patient. The coil which we use is composed of a double helix, the inner of coarse

and the outer of fine wire; and these are so constructed as to have no metallic contact, the one with the other—hence by this means we are enabled to maintain two distinct, separate currents, as you will perceive when we come to treat of disease.

The internal or coarse wire, terminates at metallic post marked D, which denotes the primary or first current coming from the time wire or external helix, hence, with the switch placed on P, you obtain the current direct from the cups or battery, as there is no metallic interruption from the battery to the patient. The sensation of this current, you will perceive, is very light and pleasant, and hence is well adapted to the more sensitive parts of the system, as the head, eye, ear, &c. It also possesses qualities different from the current proceeding from the fine wire, in that it partakes more of electricity and less of magnetism. The secondary, or induced current, is obtained by removing the end of the switch from the post marked P, which denotes the secondary. This is obtained by the current first passing through the coarse wire, and from thence to the fine wire; but as there is no metallic connection between these wires—therefore the fine wire receives it by means of induction. This current possesses less electricity and more magnetism, as there are several hundred yards more magnet through which the current has to traverse, before reaching the

patient. The center of the helix has an opening for the reception of a bundle of soft iron wires, (called the plunger,) by means of which the current may be regulated.

The terminal posts of the helix marked P and N, are its poles, and denote the positive and negative, or the two ends of the current.

DIRECTIONS FOR RUNNING THE MACHINE.

Place the zinc cup within the copper, suspended by its wooden ears. Be careful that the cups do not touch at any point. Connect the cups by means of copper wire, to the two posts belonging to the helix standing opposite the screw cups of the battery. Now, introduce the entire length of the plunger within the helix. Finally, turn the thumb-screw (over the yoke,) until the lower end forms contact with the armature of the magnet, then the vibration will commence. Fasten the thumb-screw at this point, by means of a bur resting on the yoke.

Your machine is now in good action, and to keep it so you should observe the following particulars: Keep the strength of your solution good; also, the entire surface of the zinc cup must be kept clean, and free from the coating which surrounds it during action. Be careful and have the ends of the connecting wires, and also the cups receiving them, clean and bright, as well as the posts marked P and S, also the ends of the magnet:—

These being soft iron are exceedingly liable to rust—this must be seen to; and finally, keep the machine, in all its parts, clean and bright, and it will run well for fifty years, with the exception of the zinc cup, which must of course wear out, being subject to constant decomposition during the action. This can be replaced at trifling expense at any time.

CHEMICAL LAW OF ELECTRICITY.

By chemical action, we mean the power which electricity possesses of changing the structure of organized matter—the power of decomposing and recomposing the hardest substances in nature, changing them from their organic to their elementary form or condition. It is now a conceded fact, that there are no substances in nature that can fully resist the decomposing power of a current of electricity. This quality of electricity is obtained by means of the cups alone, disconnected from the helix, and is pure electricity, which it must be, in order to possess those qualities which are assigned it. The amount of decomposing power is proportioned to the number of pairs and manner of connecting them, as we have before said. This quality of electricity differs vastly from that procured by passing the current through the helix, as can be shown by various experiments, one or two of which we will name. Take a solution of acetate of lead, pass

the current through the helix, and let the electrodes terminate in the solution, and you will not affect it in the least. Now disconnect the cup from the helix; attach one electrode to the copper, and the other to the zinc cup, and let them terminate as before, in the solution, and it will soon be changed; the oxygen, appearing ou the electrode coming from the positive or copper cup; and the base of the metal, on the negative or zinc electrode. We also see in this the course of the current which is within the series, the current is from the zinc, to the copper; and without the series, from the copper, back to the zinc. Please bear in mind, that the shorter your electrodes are, through which the current has to pass after leaving the battery, the more perfect and powerful will be the chemical action of the current; and this is owing to the fact that the conductors become magnets; hence, the shorter they are the less magnetism, and more electricity does the current possess. Again; water cannot be decomposed by the helix current, and yet is readily by the battery current. The same is true of all bodies or substances.

This fact furnishes us with an important key in relation to the proper application of the various qualities of electricity in the cure of disease, to wit: In cases of extraneous growth, excrescences, &c., as cancers, tumors, cataracts, opacities, and the like, which are to be removed,

we must not expect to meet them by means of the electromagnetic current, or helix; but use the pure chemical, galvanic current; because, as this alone has the power to decompose, and the helix has not; therefore, this is most clearly the current to be used. We have often been amused by persons wondering if we could cure cancers, tumors, cataracts, &c., with electricity; as though these substances could resist and bid defiance to the power of electricity; when at the same time, they may be well aware of the fact, that it can decompose the metals readily, although much harder than these substances. The fact is, the world is too ignorant concerning the laws governing this wonder-working agent. When they shall come to be more perfectly understood, and men dare to step aside from the old beaten tracks of their forefathers, and think and reason for themselves, independent of the belief or unbelief of others, then, will many things, which to them now appear wonderful and mysterious, be looked upon as common matter of fact transactions; and we rejoice in the thought, that the world are beginning to dare to investigate for themselves.

MECHANICAL LAW OF ELECTRICITY.

Electricity acts mechanically upon objects in the following manner. In passing a current through a nerve or muscle, its tendency is to contract one-half of the distance, and expand the other half; the contraction always appearing in the inward, or negative half; and the expansion, in the outward, or positive half of the current. The expansion of the outward half, is in an exact ratio to the contraction of the inward half; so that the absolute length of the muscle or nerve is not changed, only the relative parts. We see this principle of electricity illustrated in various ways, in nature, every day and hour of our lives.

For instance, let a board lie in the sun, and in a short time it is warped or curved; the side or surface toward the sun becomes contracted; while the other is expanded; clearly demonstrating the law: The inward end of the current contracts, while the outward end expands. Again, notice the vessel on the water, while the bow or head, opens, radiates and expands the water, the stern or tail closes, contracts in the form of an eddy; also, shoot a ball through a board; where the ball entered, the hole, or orifice is quite small, compared with that on the other side, where it passed out. The reason of which is; the head of the current expands and the tail contracts. We see the smith heat his tire, previous to adjusting it on the wheel. Why? Simply because the head of the current, (which is heat,) expands; and, as his object is expansion of the whole tire, he therefore brings the whole, under the action of the head of the

current. After adjusting it, (while in this expanded condition,) on the wheel, he then cools it for the purpose of contracting, and consequently now brings the other end, viz: the inward or negative end of the current, to bear upon it. Now, what does all this mean? or has it no significance at all? Do you not perceive it points directly to this principle, to wit: that the *inward* end of the current uniformly contracts, and the *outward* end as uniformly expands? We are to use electricity with a view to its *mechanical* action, in cases of deformity, curved spine or limbs, crooked eyes, prolapsed organs, contracted muscles, etc., the *particular mode* of which, will be given when we come to treat of these conditions.

LECTURE THIRD.

Ladies and Gentlemen:-

The subject for our consideration this evening, is general, and special Pathology, and Diagnosis. The term pathology is taken from two Greek words, pathos, or disease, and logos, meaning discourse or doctrine of.

In all the vast researches and investigations of medical men, in the department of medicine; many of which have been satisfactory and scientific, yet this department has remained an inscrutable mystery. That man is a subject of disease, pain or death, needs no more proof than the world has had during a period of almost six thousand years past. Witness the "Pale Horse and his rider," assiduously doing his terrible work of carnage, and destruction to the race; never satisfied, but ever pressing on as if eager for prey and plunder; and then ask not; are disease and death a reality? The whole world, medical men as well as others, unite in declaring this to be a fact. Medical men not only know that man is a victim of disease, but they know to a certain degree of what his lower entity, his ponderable, material part is

composed. Anatomy and physiology have furnished them with the means of accurately knowing and understanding many important facts, concerning the ponderable, material part, of our being; as for instance, the number of bones and muscles, of which the body is composed; their texture and uses, also, the various organs and parts which unite to make up the sum total of the physical structure: when chemistry comes in to inform us, of what all these things are composed chemically; all of which knowledge is proper and valuable. But where, I ask, is the medical school to be found, that teaches us of man, in his higher and nobler being; in fine, of mind, that first, grandest, and most elevated principle of our being? That which controls and governs the lower, material or physical part; and upon which it is dependent, and by which, it is supplied with that element, which enables it to perform all its functions and operations in life? Again, we ask: where is the school that has given us a rational, and intelligent exegesis of disease? I am aware that such an interrogatory, however honestly made, may be received by the profession, with sneer and contempt; and perhaps by the masses may be thought to be uncourteous and irrelevant; but as we advertised you in the outset, our business is to search after facts, soher facts and truth; we

should not be too much concerned where we are lead; only that she is our leader.

That much has been written, and great pains taken, by our schools, to instruct the pupil on the subject of pathology, we are well aware; but that the question;—what is disease? has been fairly, frankly, accurately and scientifically answered, we do not believe.

Authors and teachers have attempted to solve the mystery; some in one way, and some in another. Prof. Dunglison defines it thus: "An opposite state to that of health, consisting in a change either in the position and structure of parts, or in the exercise of one or more of their functions, or in both." Now we contend that this is not a definition of disease, but of the effect of disease. We hold that disease is an unseen, hidden reality, lying back of the effects, which only are to be seen and are tangible. In order that you may the better understand our explanation of disease, we will in the first place define health. Health when applied to mankind, is a perfect balance of the two (positive and negative) forces, of electricity pertaining to the man. The legitimate results of which are, a proper and complete performance of all the functions of the animal economy. The same is true when speaking of a single organ or part.

Disease on the other hand, is a loss of balance of these two forces, and may be confined to a single organ

or part, or may embrace the entire person; the results of which, become visible and tangible, to both the patient and beholder; and is manifested in various ways; as, in either a partial or total suspension of the proper functions of the part diseased; or perhaps in some instances, first an over excitement, and afterwards a suspension. It also manifests itself in pain, distress, or agony, and in decomposition and death.

Diagnosis: This is that branch of medicine, the object of which, is the discrimination of diseases. It is one of the most important branches of general pathology. The first duty of the physician, on being summoned to the bed-side of the sick, is, to ascertain the true condition of the patient. Before placing you in possession of a scientific and reliable method, (as well as rational,) we will briefly review the popular and usually practical one; and then submit the two for your decision, you, being jurors in the case. Now, ladies and gentlemen, in presenting this picture to you, I shall endeavor not to mislead, or color too highly; but simply to give you a scene of every day's occurrence; to which not only myself, but every other physician, and yourselves also, have been eve witnesses.

The patient is sick, the doctor is called; and what follows? Enter first scene. The doctor feels the wrist, (perhaps pulse; looks at the tongue; shakes his head;

after which a dialogue ensues, thus: Doctor—question:

"How long have you been ailing?"

Ans. "Three or four days, or weeks," as the case may be; "in fact I have not been well for a long time.

Q. "Are your bowels regular?"

Ans. "Not very."

Q. "How often do they move?"

Ans. "Some times once a day, and some times once a week."

Q. "Have you any nausea?"

Ans. "Some times."

Q. Any pain in the region of the stomach, or bowels?"

Ans. Some times, dull pain in that region."

Q. "Any pain in back, or head?"

Ans. "Back feels tired most of the time."

Perhaps the doctor feels the pulse, and looks at the tongue again, and thus he proceeds until he is satisfied what is the condition of the patient. Ah! did I say satisfied? Nay verily. In my judgment, no honest, judicious, candid, and intelligent physician, is erer satisfied of the condition of his patient, by the above or any other mode of examination within his knowledge; and hence, he is doomed to guess, suspect, and take a leap in the dark; and that too at the very outset, when a failure here may be, and often is attended with fatal results to the patient.

Now follow that doctor, (if honest and candid,) and penetrate the inmost recesses of his mind; and witness the following soliloquy. "Oh! the uncertainty of our method of diagnosis. At the best, it is mere guess work, and in the language of one of the eminent of the fraternity, (Dr. James Jackson, Jr.,) 'When shall we ever get to a solid bottom? Shall we ever have fixed laws and principles? or must we be forever doomed to hang our heads; to guess, to suspect?' Or in the language of another; either Dr. Rush, or Waterhouse, I think; 'Our system of medicine is in the highest degree uncertain, except that we have already destroyed more lives than war, pestilence, and famine combined.''

We are to bear in mind this declaration was made prior to the present war, and also, that these are confessions from those occupying high positions in the profession. Now witness the second scene: The patient per chance does not improve, but declines; and then medical gentlemen of supposed talent and skill, are summoned in consultation. After availing themselves of the best means within their reach, for a thorough examination, they proceed; accomplishing which, peradventure, they retire for a private consultation; the result of which, is somewhat as follows:

Dr. A. from his examination, is pretty well satisfied, (Zuesses,) that the chief difficulty is in the liver. Dr. B.

attributes it to the stomach. Dr. C., differing a little, places it in the spine. Dr. D. is of the opinion it is in the bowels: while Dr. E. regards the seat of the disease, as being in the womb. Dr. F. takes higher ground, and places the disease proper, in the head: and regards all the other symptoms as sympathetic. Now ladies and gentlemen; this is no fancy, or imaginary sketch; but a real, actual, everyday occurrence. One guesses, another believes: the third thinks, the fourth is of the opinion, the fifth is inclined to think, the sixth is pretty well satisfied. Not one daring to assert positively or if he does assert not feeling positive,—without a doubt in the case.

Now, Why is there so much mystery, and uncertainty connected with this, the most important of the healing art? Is it probable that the great, good and wise Disposer of our being, should make us susceptible of, and place us where we would be constantly exposed to various forms of disease; the result of which in a large proportion of instances is death: and at the same time, place within our reach, no surer means of apprehending those diseases? We cannot, nor will we for a moment, indulge the belief; for this, in our opinion would, be charging God with superlative folly; yea, worse, absolute injustice. But the whole difficulty lies in the fact, to wit: God has created certain immutable laws, by

which man is governed; but man has failed to apprehend, and understand those laws; hence, he is groping in darkness, and ignorance; believing himself, and the race to be the mystery of mysteries; infinitely past his powers of comprehension; and is therefore content to know a few things pertaining to the gross, animal part of his being; while the great fundamental laws of life, health, disease and death, are but little understood and taught; even by our schools of medicine; and thus, occupying in a certain sense, the position of the Scribes and Pharisees, paying tithes of mint, anise, and cumin, and leaving the weightier matters of the law, such as mind, and the modus operandi of its operations on the animal economy &c., to a fearful degree, untouched.

Now ladies and gentlemen: we will pursue these gloomy and foreboding realities no farther; but invite your attention to a theory of diagnosis: having for its basis, principles as immutable as their Creator.

When we consider man in the light in which our subject now stands; as an electrical being; composed of mind and matter; and that these are connected by a third, and intermediate principle, viz: electricity; and that each nerve in the human system is a magnet, under the control of the same law of the positive and negative forces of electricity, that all magnets are; and also, that all the manifold operations in the physical system, are carried on by the mental, operating through the

electrical; also, that when these two forces are balanced, health of the body is the legitimate consequence; but when they have lost their balance, disease must be the unavoidable result; thus making electricity both the cause of health, and disease.

Do you say, this is impossible: no more so than that oxygen and nitrogen when combined in certain proportions, should constitute healthy atmosphere, and in other proportions, a deadly poison. I say when we consider man in this light; the theory of diagnosis is resolved to two points, viz: 1st, of ascertaining the particular part of the system that has lost its balance; and secondly, to know in what consists the loss.

Before proceeding to give the method of examination; it may be necessary to remark; that in health, all parts of the system are not equally susceptible to the current; the cerebrum much more so than the cerebellum; also, the serous surfaces more so than the mucus. This fact should be borne in mind, as otherwise you might be led into error in your examination. We come now to the specific directions for diagnosis. First, put your machine in action with switch on P; attach the insulated sponge to the positive electrode; wet the back and front of the neck, place the positive wet sponge over the first cervical vertebra, or upper portion of spine; make firm pressure; then grasp the negative electrode in the other

wet hand; and with the point of a finger of the same hand, make touches in front about the throat. I would here remark; your touch with the finger should be uniform; while it is not hard enough to hurt or annov the patient; vet, it should be firm and even. After a proper examination of this part, lower your positive sponge from one to three inches; now moisten the surface over the trachea, and upper portion of chest; and make your examination in that region; and thus pass on through the entire body; keeping the positive on the spine, and a little above the parts you are examining, in order that the current may follow the course of the nerves. You will seldom find the primary current of sufficient intensity for the purposes of diagnosis, unless it be in extremely sensitive persons; therefore, after commencing your examination, and thus introducing the patient to the current; you should turn the switch on the part marked S, which gives you the secondary or induced current: the passage of which, through various portions of the body, produces sensations and feelings in the patient, varying, according to the strength of current used; also, according to the existing electrical condition of the parts through which it passes. Explanation: When an organ or part through which the current is made to pass, is electrically balanced, it may be sensibly felt; but will not be at all painful;

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whereas, if the part is surcharged, which is equivalent to being electrically positive, the same current produces more or less pain, in proportion to the positive condition. On the other hand, if the organ or part has less than its natural quantity, thereby rendering it electrically negative; the same current produces little, or no sensation, in proportion as the organ is more or less devoid of electricity. To illustrate. Now then, suppose in the midst of your examination, the patient starts suddenly, from pain produced by the current; again; suppose he is a little roguish, and starts not from actual hart, but in order to lead you astray and deceive you; your remedy is at hand. A case in point occurs to my mind, which I will mention.

While lecturing in Syracuse, N. Y., a gentleman came into my office, saying he understood I claimed to detect and locate diseases without asking the patient any questions. On being informed that he understood correctly, he desired to put my skill to the test on his own case. Before commencing the examination; I explained to him the sensations he would perceive on passing the current through healthy parts; (which should always be done,) I also, gave him the privilege of reporting at any time, when the current should be painful or unpleasant. He replied, that he did not come to tell me any thing; but to have me tell him; accordingly I commenced my

examination with a light secondary current; he, feeling a not unpleasant sensation. I had not progressed far, when on touching a certain point, exactly as I had touched the adjacent parts, he sprang with all his might. Not knowing but he might be trying to deceive me; I assayed to make another touch at the same point; when he exclaimed, "for heaven's sake, don't touch me there again." I passed on with my examination, in the course of which, I (unexpectedly to him,) made another touch on that point: when he fainted instanter and fell on the floor. I then lessened my current, (by withdrawing the plunger,) and switching on the primary, and touched the point again, but found it so susceptible that he could not bear even a light current, when the same current, would produce no sensation at other points; neither would the same touch, produce any sensation at this point without the current. Now what is the explanation of this phenomenon? Simply, that there was existing a positive electrical condition, or in other words, there was irritation, and inflammation of the parts, and hence, in passing a current through the part, the irritation was increased, and pain the result.

After having completed your examination from the throat, to the pubic bone, embracing the entire front portion of the body; then, seat the patient on the negative, and after wetting the spine, carefully examine that

in its whole length, with the positive electrode; and I would here remark. All patients, will bear a much stronger current on the spine than on any other part, hence you are to increase the strength by means of the plunger, and as most patients will bear more than you can handle with your finger, you may attach the electrode to the insulated sponge; and examine the spine with that, in such cases. The spine examined: next wet the hand thoroughly; (bear in mind, that dry hair is a poor conductor,) Now, switch on the primary currents, withdraw the plunger, the patient seated on the negative, you holding the positive in one hand, and with one finger of the other, make your touches all over the head, as you did on the body, keeping in mind that the cerebrum or front brain, is naturally much more sensitive to the current, than the cerebellum, or small brain; hence, you are to regulate the strength of your current accordingly. Perhaps this question may arise in your minds. How are we to know, when a part is in a negative condition? I have given you the means of knowing above; to wit. The more negative an organ is, the less it is susceptible to the impression of the current. But a still more grave and serious question, may arise in your minds, viz: Suppose we do find an extremely positive or negative place; how shall we, who are comparatively ignorant of the anatomy of the

system, know or be able to decide what particular organ, or part is involved; or, what particular name to ascribe to the disease? In answer to the first part of your interrogatory, I would say. Although a thorough knowledge of the anatomy of the system, might be to you very interesting, and often exceedingly profitable, and useful: yet, it is not by any means absolutely imperative, in order to arrive at the facts in the case. But one thing is very important for you to know; and that is, which side of the galvanic center the disease is found: else; though you might be able to find it, or know that it existed somewhere between the two electrodes, you would not be able to intelligently polarize, or cure it. Those of you, who are not medically educated, (and many who are,) will need to depend somewhat, on the patient to decide this point. As they are always able, not only to feel the amount of pain or hurt, but tell you very nearly the exact point.

In reply to the last question: I would say. It is not at all necessary to the cure, that you are able to say, the disease is cynanche trachealis, Angina apthosa, vel pectoris, Otitis, Ophthalmia, Pericarditis, Endocarditis, Gastritis, Enteritis, etc. All this, is mere subterfuge; and prating about names that have no practical value to the suffering patient; resorted to, in order, to cover up, and disgnise the ignorance that prevails, in relation to

the great, and important facts pertaining to the REAL condition of the patient; and at the very time too, while the sharp sickle of diseases, (not technicalities,) is being thrust into the vitals of the poor sufferer, and he being swept from time to eternity.

Had the profession labored one-half as assiduously, and spent one-tenth the time, to know and understand, the true nature of disease, and rationale of cure, that they have, in forming nomenclatures; far better had it been for the world; and, we think we hazard nothing in saying, that millions of precious lives might have been saved, which have been sacrificed. Good God! what an awful account to be settled!

LECTURE FOURTH.

ELECTROPATHIC TREATMENT OF DISEASE.

Our Nosology will embrace the following general classification, viz: Positive and negative diseases; which classification comprises the sum total of all the diseases incident to the human family; and these are subdivided

into what we shall denominate healthy and unhealthy disease.

These terms may appear somewhat arbitrary, but we trust we shall be able to show you, that they are founded in reason, and fact. Under the term positive disease, we include those which possess a greater share of electricity; while negative, denotes a less amount than the organ, or part possesses in a state of health.

By the term healthy in the subdivision, we mean those diseases which do not partake of a malignant, or poisonous character; whereas, on the contrary, unhealthy disease possesses this characteristic. It will scarcely be expected in a work as limited as we propose to make the present, that we should enter into a detailed account, of all the technical applications ascribed to diseases, in medical works; and so far from considering it to be necessary to the student's success, we believe it would be a hindrance, and seriously militate against it, by tending to burden the mind with an endless mass of subterfuge, possessing no practical importance whatever. But we shall content ourselves, by bringing before the mind, a sufficient variety under each head, to enable the student to understand their true condition, and philosophy of cure: and understanding which, he would readily perceive by analogy, the condition and rationale of cure, of others not found in this work.

Under our first general head, or that of positive disease; may be found the following conditions. Active inflammation, whether general or local; fevers, &c. Under the second head, or negative disease, may be found: paralysis, either partial or complete. We use electricity in the treatment of disease, with reference to its polar, chemical, and mechanical laws; (which laws you will find explained in a former lecture; and use it in the form of either general, or special treatment. General treatment is to be given, when we wish to bring the whole body under the impression of the current; and special, when we wish to act upon a particular organ or part only; for you will please bear in mind, that the current goes where it is sent, and nowhere else. We have often been astonished to hear men, making pretensions to science, yes, and even physicians, claiming to know all about the use of electricity too, raise this objection: "You cannot confine electricity to any particular place. It is so diffusive in its nature, the moment you touch the patient at any point, it diffuses itself through the entire system alike." And as astonishing as it may appear, many of them are so ignorant, as to suppose that if only one electrode is brought in contact with the patient, he will receive a shock.

As well might we argue that when a thunderbolt strikes your dwelling, the same instant it strikes mine,

and every other dwelling on our planet. You see at a glance how ridiculous the idea.

GENERAL TREATMENT.

There are two methods of administering general treatment, and two objects to be attained; one of which is, the reduction of vital forces, and hence depletion: the other is, an increase of these forces, and hence a tonic: and these various results are obtained, in accordance with the different methods of administering.

The positive pole always reducing, because, as we told you it gives off the current: while the negative tonifies, because it receives the current. It is exceedingly important that you keep this fact in mind, as an error here might often lead to serious results in practice. To give the antiphilogistic, or depleting general treatment: Seat your patient on the negative pole, and with the positive pole enclosed within a soft, wet sponge, manipulate the entire surface of the body, with the secondary helix current; or place the negative at the feet in water, and manipulate as before. By thus treating, you will reduce the patient in proportion to the strength of your current, and the length of time you treat.

The other method is; to place the positive pole at the points where the negative was, in the above process; and manipulate with the negative pole. By this method

you produce the opposite effect. In manipulating; your passes should always be made downwards, so as to avoid interfering with the lamina or scale, with which the cuticle or outer skin abounds. Your passes should also be firm and even; with a broad sweep; but before commencing, test the strength of your current as follows: Your patient being in contact with one electrode, or end of the current, and you holding the other in one hand, with a finger of the other (wet,) touch the patient, at which instant you close the circuit, and hence the current is established. By this means you are enabled to ascertain the exact amount of current you have, which knowledge is essential, as otherwise you might shock the patient, which should never be done in any case. After thus testing; commence your manipulating, first with light pressure, in order to accustom the patient to the sensation, after which gradually increasing your pressure, until it is firm and steady. After treating the spine and back, wipe dry, and pass to the front, and upper portion of trunk. Now lessen your current, by means of the plunger, and commence with a light pressure as before, increasing gradually. Treat the chest, and wipe dry before treating the abdomen, and thus proceed with the entire patient, the whole occupying from ten to thirty or forty minutes.

POSITIVE DISEASE.

The first condition we shall name under this head is, Apoplexy.

Our first duty is to understand the nature of this disease, hence we ask the question, what is apoplexy? Suppose we go to the standard text books of our medical schools, and we receive the following answer. "Apoplexy is derived from a Greek word, which signifies to strike with violence. An effusion of blood which occurs suddenly in the substance of an organ or tissue; and when applied to the brain, as it generally is, it is characterized by diminution, or loss of sensation, and mental manifestation; by the cessation, more or less complete, of motion; and by a comatose state. It consists in pressure upon the brain; either from turgescence of vessels, or from extravasation of blood." Now this is a very correct definition of the effect of a certain cause, which is the disease, lying back of all this; but we contend it falls very far short of explaining the disease.

Now suppose we ask for the philosophy of the blood going to the brain in this unusual quantity; and what is the reply? That it is natural for the heart, in apoplexy, to throw the blood thus, and hence carrying the idea that the heart is possessed of a great deal of intelligence. Now if the heart possesses such power; why does it not produce apoplexy sometimes in the dead man, as well as

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in the living? for it is as actually a substance in the one ease, as in the other. Who ever heard of such a phenomenon?

Now, ladies and gentlemen: the facts in the case are these, (as facts are what we are dealing with.) In this ease, as m all others, disease or the reality, begins in the finest, and ends in the grosest or material, physical parts; hence, the disease is hidden, unseen, but the effects are seen and tangible. To illustrate: observe the phenomena of vegetation. The grain of corn, sends out its roots and blade, and finally its ear and fruit, all arrive at maturity, decay and perish. Now all these are but the effects, (and are tangible,) of an unseen, hidden reality. Exactly so, with the case under consideration. The explanation pertains only to the effect of a certain cause, concealed, hidden, which we do well to investigate, and if possible understand. Now in apoplexy, the disease is: a loss of balance in the two, positive and negative, forces of electricity, in the part or parts concerned.

This loss of balance may be occasioned by either mental, or by physical impressions, from without. Now the question arises: What magnet or magnets, part or parts, are in this case concerned? We answer, the whole compound magnet, or the entire body; but especially the brain. Secondly: In what consists this loss of balance? Answer: The brain, (as I told you in a previous

lecture,) which in health should be, and always is electrically negative, has now become positive. It is surcharged with electricity, and this occupying a higher position than the gross, ponderable blood, and also, holding a dissimilar or opposite electrical relation to it, viz: it being positive and the blood negative, (relatively.) Now by virtue of the universal law, unlikes attract, therefore, the blood (more particularly venus,) is attracted to this organ, and continues to accumulate, occupying either a longer or shorter period of time: until its quantity is so great as to produce compression, and collapse of the organ, when the above symptoms appear. The surface and extremities, which in health are electrically positive, have become in this case negative; as is indicated by the coldness which is usually a concomitant symptom in these cases. In fine, taking the case as a whole. In lieu of the current passing from the brain downward and outward, as it uniformly does in health, it is now reversed, or passing upward and inward.

Having explained the real condition of the case, we are therefore ready to proceed to its treatment intelligently; the philosophy of which is, to restore the balance of these positive and negative forces to their wonted equilibrium throughout the entire magnet, or system. Reason, and common sense, would teach us that the nature of our remedy, should be as subtile, as

is that of the foe we have to meet. The object to be attained is simply this. To make the magnets in the system point in the opposite direction; making the inward ends point outward, and vice versa: in fine to polarize the case. By refering to the second lecture, you will see the law of polarity explained. The manner of proceeding in this case is as follows: Place the patient's feet in a dish of water, (warm if at hand,) into which you put the negative electrode, with the positive inclosed within a soft wet sponge, commence your treatment with light secondary current; first treat the spine, embracing the whole length, with each manipulation; rubbing briskly; after treating this one or two minutes, increase the strength of the current by means of plunger, and continue your treatment on the back, and whole surface of the body; but mainly on back, five to twenty minutes. At the end of which time, if conciousness does not return, and the patient begins to arouse, then wet the head (thoroughly,) switch on primary, (light current,) for a few moments, after which, increase, until you have entered the plunger its whole length: which you will perceive will then be a lighter current than if it is withdrawn on the secondary. Treat thus from three to ten minutes if necessary. You will scarcely ever have occasion to treat the head in these cases, more than two minutes, and in many conscious-

ness returns by merely treating the spine. A case in point occurs to my mind. A few years since, a gentleman in the meridian of life, was struck down instantly with apoplexy: medical aid was called immediately, and every means within their power was brought to bear in the case, all of which proving of no avail, a consultation was had, which resulted in the decision that the patient could not live to exceed twelve hours. The attending physician, knowing of a certain student of mine, not far distant, who had accomplished some, (to him remarkable) cures, dispatched a message, requesting him to come immediately to the case. On arriving, he found the patient perfectly insensible and camatose, extremities and surface cold, head, face and neck, in a perfect state of turgidity. On being informed by the medical gentlemen, that they could not by any means within their knowledge, save the man, and that he would not in their opinion, live but a few hours longer, and desiring if he could do anything to do it. Accordingly he commenced the treatment according to the direction, when after treating about fifteen minutes, consciousness began to return; and at the end of thirty minutes, the man was perfectly sane and rational; and in a few days was restored to his natural health and vigor. In the treatment of apoplexy, you are to be careful, or in your anxiety to relieve the patient, you may be liable to carry

it so far, as to kill by exhaustion; hence you should observe the following rule: When consciousness begins to appear, desist; keeping close watch of the patient, and when fully restored to sanity, discontinue your treatment altogether. Now let us briefly review this ease, and ascertain if possible, why those physicians could not reach it. For two reasons: first, they had no clear and definite idea of the real disease, only understanding the effects, hence their whole efforts were aimed directly at these. The effects being manifested in the gross ponderable blood, and other portions of the material system, they, accordingly, assailed them with like gross weapons: but the condition or actual disease, being far more subtile and imponderable, could not be reached by any such weapons; but required one as subtile in its nature as itself. And electricity being such an one, hence, when that was brought to bear, in conformity with certain established laws, the disease was made to yield, and that yielding, the effects must of necessity cease.

OPHTHALMIA: OR ACCUTE INFLAMMATION OF THE EYE.

I wish here to call your attention to an important principle, which you should by no means lose sight of, viz: In treating a positive disease, if it is *external*, you must so arrange your electrodes as to make it appear between them, making it appear of course within the negative half of the current, or between the positive electrode and center of the two. You should seek also. to run it through the least important organs or parts, possible. In this case the disease is usually confined to the more external parts of the evc, hence, your treatment should be external. Before commencing the treatment, we must understand the real nature of the case, which is: a loss of balance of the two forces of electricity, in the magnets or nerves of the parts concerned; secondly; the loss here, as in the case of apoplexy, consists in a superabundance of electricity. This standing in a positive, and the blood in a negative relation, and the blood being subordinate to it; therefore, the blood in obedience to the immutable law of unlikes, is attracted to it; and the electricity being the fire, while the blood is the fuel, hence when united, combustion is the natural result, and hence also the philosophy of pain, redness, unnatural heat, &c.

TREATMENT.

The object in treatment is, to balance the electricity, or in other words, remove the cause, when the effects will cease. In this, as in many other local diseases, the patient may need more or less general treatment, to accompany the special; if so, you should

give the outward, and downward current. For special treatment, you will find in most cases, the primary current of sufficient strength, and the best adapted to the case. First then, after putting your machine in action, inclose the negative electrode in a wet sponge, and let the patient hold it in the hand corresponding to the side with the eye; the operator, with the positive inclosed within a very soft sponge, treats all about the region of the eye, occupying from two to ten minutes. After thus treating once or twice a day, for a few times, if the disease does not yield, you should then attach the positive to the eye instrument; filled with pure water; into which the eye is to be placed, directing the patient in holding which, to grasp it by the wooden or insulated portion, in order that he may not divide the current; while the operator, with the negative electrode treats the back of the neck and spine, with such a current only as is pleasant, or at least not painful to the patient. From three to five minutes at each time, is long enough; repeated as often as the case seems to require, seldom, however, more than once a day.

CYNANCHE TONSILARIS, OR QUINSY.

This is characterized by inflammation, redness and swelling of the throat, and tonsils; and is the result of a positive condition in the magnets or nerves of the part. The indication is to reverse the polarity, or balance the electricity. In this case, you should intersperse general, with special treatment, as the whole system has more or less lost its healthy balance, the tendency of which is for the current to point inward, in place of outward, as it does in health, hence you are to seat the patient on the positive, and with the negative treat the entire body as high as the diaphram, using a good current; after which, attach the curved throat instrument to the insulator, and this to the positive electrode; after tying as large a sponge on the ball of the instrument as the patient can well introduce into the mouth; wet and direct him to pass it in the throat as far as practicable. Now the operator, after lessening the strength of current, with the negative treats the spine first, directing his main efforts to the cervical vertebræ, and finally following the whole length of the spinal column. Now there are few points in the treatment of this case, worthy of note; First; The enemy or disease, is not external, but internal; hence, we must so arrange the electrodes as to bring it between the two; secondly; The disease being positive, we must therefore so arange the electrodes as to not only make it appear between them, but it must appear between the positive and center of the two, being in the negative half of the current, or, we fail to polarize it; hence, by placing the negative on the spine, and positive on, or just above it, we are sure to make it thus appear; and consequently to change its polarity. It is sometimes admissable in bad cases, to repeat the treatment once in two, four, or six hours, for a few times.

CYNANCHE TRACHEALIS, OR CROUP.

The electrical condition and mode of treatment in this disease, are so nearly allied to the last, that we deem it unnecessary to say much in reference to it. Two thoughts, however, in addition, demand notice. In giving special treatment, the circuit should be closed with the negative lower, on the spine, than in quinsy, as the disease is situated lower.

PNEUNOMIA, OR INFLAMMATION OF THE LUNGS.

In this disease, there is also a positive electrical condition of the part. You must by a careful diagnosis, ascertain the exact locality and extent of structure involved; which you can very accurately do, by following closely the rules laid down for diagnoses. In this disease, as much will be accomplished by general as by special treatment.

The general electrical condition of the patient in this case is reversed, the current is pointing inward from the surface and extremities, to the internal organs, but

especially lungs. Now in the normal or healthy condition, the current moves in the opposite direction; from the center, to the surface, hence in your treatment, you should seek to imitate nature, and not to thwart her; your object being to lessen the amount of electricity within, and increase it without, you must therefore use the inward end of the current within, and the outward end without: therefore commence with general treatment, as follows: Seat the patient on the positive electrode, (that being the inward,) and treat the entire surface of the body, as high as the diaphram, with the negative; (that being the outward,) wipe dry and cover; after which tie a large sponge on the ball of your throat instrument, as large as the patient can well introduce: attach this to the insulator, and that to the positive electrode; and direct the patient to pass it into the throat, holding it by the insulator. Now do you not perceive, you have the inward end of the current planted internally, while you with the negative, or outward end, treat the entire surface of the chest: occupying five to ten minutes; wipe dry, after which, go over the whole surface of back and chest again, in the following manner: Let the patient introduce the instrument, as before; the operator holding the negative in a wet sponge, in his left hand, and with the right, perfectly dry, he makes rapid passes, (with the whole internal surface of the hand,) upon the patient: treating thus two to five minutes, with as strong current as the patient can endure in the mouth.

The above, constitutes the plan of general treatment in this case, and should be repeated, as often as each particular case may require; seldom oftener than once in twenty-four hours, and in many cases less frequently. For special treatment in the case, proceed as follows: After ascertaining by an electrical diagnosis, the exact locality and extent of diseased structure, proceed to polarize it, using the law of polarity, as laid down in the second lecture; by placing the positive electrode as near the seat of the disease as possible; and the negative, at such a point, and distance from it. as shall make the disease appear between the two; and vet between the positive and center of the two; thereby bringing the disease within the negative portion of the current; consequently must of necessity change its polarity. Perhaps some of you are ready to ask: As you have told us where to place the positive, please inform us where to use the negative? I answer, I have virtually done so in the above direction: but as you desire that I should be very explicit, and as I design so to be, and in order to fix these principles indelibly on your minds; I will illustrate them by a few examples. First; suppose on examination, we find the middle lobe

of the right lung, to be the seat of disease. Now suppose in our special treatment, we place the positive electrode, directly over this, and the negative in the right hand of the patient: shall we change the polarity of the part? I answer no: because, in thus arranging the electrodes, we do not make the disease appear between them. Again, suppose we place the negative under the patients feet, we fail for the same reason; but if we place the positive directly over the disease, and the negative opposite, on the spine, then we shall succeed, inasmuch as in this case, the disease will apear between the two; and also, being nearest the positive, you will therefore of necessity effect the desired change. Now then, to guard you against running through vital, important organs, suppose again for instance, while treating for quinsy, with the positive in the throat; you were to place the negative on the head, do you not perceive by the law of electrical polarity, you be charging the brain, disturbing its healthy balance, and though you might perchance cure the quinsy, you do it at the risk of destroying a more vital organ. A lady once said to me, that her doctor thus treated her a few moments, for sore throat, and that she never experienced such a headache in her life. You doubtless see the reason why.

PLEURITIS: OR PLEURISY.

By this is meant in technical language, an inflammation of the lining membrane of the thorax, or chest. This is also the result of an electrically positive condition of the magnets or nerves, going to supply that membrane. The mode of treatment will be deduced, by reference being had to the last named disease.

HEPATITIS; OR INFLAMMATION OF THE LIVER.

In this, as in other positive diseases, much is to be done by means of general treatment, using the outward current. In giving special treatment, in order to make the disease appear between the two electrodes, and within the negative half of the current, you must place the negative, on the opposite side, just above the hip; and with the positive, treat over, and just above the disease: treat also with the negative, down the entire left limb; in order to disperse the current over a large amount of surface. You will no doubt readily perceive, that should you use the negative on the same side, and limb, with the disease; that you would fail entirely to touch the disease: as by so doing, you would not bring it in range, and hence fail to reach it.

INFLAMMATORY RHEUMATISM.

This is a positive disease, usually located in the limbs and joints, but occasionally affecting the internal

organs, by metastasis; as the heart, lungs, &c. Rheumatism is a disease that has usually set at defiance, the skill of the ordinary methods of practice, of all ages. One professor, when asked by his pupils; what was the best remedy for rheumatism, answered. "Six Weeks." By which he must be understood, "You can do nothing for it." We answer the question, by saying, from six minutes to six days.

This is a case also, where you will need to use more or less general treatment: first, throwing the current to the surface, by the outward current, then use the downward treatment. The method of proceeding is this: First seat the patient on the positive, and with the negative electrode, treat the entire body, secondary current: immediately after which, place the feet in tepid water, into which place the negative, and with the positive, treat the whole surface of the body again, occupying only about three to five minutes; light current. By thus proceeding, you first direct the current outward to the surface; and secondly; run off the surplus current to the water.

In the special treatment, suppose the knee joint, to be the seat of disease. By the law of polarity, you are to reverse the electrical condition of the part, by doing which, you remove the cause; when the effects must necessarily cease. The negative, is to be placed at

the foot, (in water if handy;) and, with the positive, treat the whole surface involved. These cases are usually cured in from one to five treatments.

INTERMITTENT FEVER.

This is a fever marked by paroxysms, the most usual types are Quotidian, Tertian, and Quartan. Each type demands a separate description. Commencing with the cold stage; We again ask. What is disease? Ans., a loss of balance, &c. In what consists the loss in the cold stage? Ans. The surface, and extremities, which in health are electrically positive, in consequence of a reversion of the current, have become negative. The brain and internal organs, having received the current from them, have consequently become positive, which fact is evinced, by the extreme and unyielding coldness of the former; and heat and thirst, which usually attend the latter.

The philosophy of cure in this, as in all other cases is, to re-establish the equilibrium of electricity in the system. The first thing to be done is, to administer general treatment: by seating the patient on the positive electrode, and with the negative, treat thoroughly, the whole spine: first with a strong current; working briskly, from three to five minutes; wipe dry, and treat the front part of the body, in the same way, only with a

lighter current. After which, if there is pain in the head, give a light treatment over the spine only, with the positive, the negative being at the feet in water. The above is the method of treatment, either in, or just previous to the cold stage. I have never failed to bring the patient out of the chill, by one treatment. Treatment in the stage of fever or hot stage. If there should be any chill accompanying it, use the same treatment; but if not, you may omit the outward treatment, merely giving the downward; negative at the feet, in water, giving thorough treatment over the entire body, with the positive. By this method, you run the electricity off, and hence lessen the fever. The sweating stage, demands generally no treatment; as this is only an indication, that the Vis Medicatrix Nature, has had a combat with disease, and having conquered, is now enjoving her repose.

LECTURE FIFTH.

NEGATIVE DISEASE.

Ladies and Gentlemen:

By the term negative disease, as we told you in the last lecture, is meant, that kind, possessing a less amount of electricity than the part, or organ possesses in health. As in the previous lecture, it is not possible for us to speak of each particular nerve, or part of the system separately, thus affected; to do which, would add very little or nothing, to the practical utility of the work. We shall therefore seek only to present before the mind, a sufficient variety under this head, to give the student a clear, and correct knowledge of their nature, and treatment; and by those dilineated, have a basis by which to form a correct judgment, and arrive at safe conclusions, in regard to those not herein named. In order that your mind may not be confused, in relation to the quality, or kind of electricity to be used, in the various diseases; I would remark; that in this, and the last lecture, none are intended to be mentioned, except those that are cured by the primary, or secondary helix current, (or Electro Magnetism.) And not only those mentioned in these two lectures, but all of the same class, or kind that are *not* mentioned. Under this head, the first disease we shall speak of, is,

AMAUROSIS.

This is a disease of the optic nerve, and may be either partial, or complete; producing either partial, or total blindness; and is considered by the schools of medicine, as being an incurable disease. In order to present this in the clearest possible manner before the mind; Let us suppose a case of complete, or total blindness from amaurosis. And here I would remark. It is astonishing, what large numbers of such cases we find in our travels. Among the vast number of cases of this kind, which have come under our observation, we will mention but a single one. In the winter of 1858 and 9, a gentleman totally blind, in consequence of amaurosis, was led to our office by a boy acting as guide. By the elosest possible examination, no unnatural appearance could be detected about the eyes, save, that the pupils were dilated, beyond their natural size. In this condition he had been for the last six months previous; notwithstanding he had consulted the (supposed) best authority in the United States; all of whom, pronounced the ease incurable, and entirely hopeless. Relating to the success in the treatment, we will only say, that at the tenth operation, the eyesight began to re-appear; and after receiving sixteen treatments, the patient resumed the practice of his profession; the sight of one eye being restored. For reasons entertained by the gentleman, we made no attempt to restore the other eye.

Now what are the facts in the case? Inasmuch as the structure of the organ, was in no way injured, or interfered with, its material parts were all perfect and entire, hence, Why could not the patient see? We answer in the first place negatively. Not because he had no optic nerve, or retina. Not because there were no humors in the eye, or lens wanting. Not because any of its coats were destroyed. Neither was it, because its membranes were diseased. Nav, it was for none of the above reasons, as these were all perfect, in all their parts: neither was it because the involuntary, or voluntary powers of the mind were impaired; for these were perfect. What therefore, we ask, was the reason? The answer to this question, is given in a principle laid down in the first lecture, to wit: The mind, by both its voluntary, and involuntary powers, governs the body, and enables it to perform all its functions, and operations in the animal economy also; The mind; being so infinitely superior to the ponderable, gross body, therefore, it cannot come in direct contact with the latter; but uses an element, through which to govern the body; that

element holding a medium relation between the two. which is none other than the nervo-vital ffuid, or electricity. Now let us apply the principle to the case in hand, and see if we have not a rational, philosophical explanation of the loss of vision. But, before making the application, we will again define disease, which is: A loss of balance of the two, or positive and negative forces of electricity, in the organ, or parts concerned. Now, in the normal, or healthy state, the current in the optic nerve, is passing from the origin, to the termination, or retina; hence, the electrical relation of the first half, is negative; being the inward, and the last half, positive, representing the outward portion. But in case of total blindness from amaurosis, the current is reversed, in its direction; hence, the supply is cut off, the consequence is, paralysis of the nerve, and as a natural result, a suspension of the function of vision. Now then, the nerve being robbed of the electricity, and it (electricity,) being the medium through which mind controls matter, or the connecting link between mind and matter, the medium being gone, therefore the mind has no means by which to come in contact, and govern the organ; hence the function of the latter, must of necessity be suspended. That we entertain correct views of the nature of the case, will be seen by considering the philosophy of cure, which was to re-establish the connecting link, or nervovital fluid, if you please, in the nerve. The doing of which, enables the involuntary powers of the mind, to operate through it, and thus restore the lost, or suspended function of the eye again.

Method of proceeding. First, give a few general treatments, with the outward current; after which, wet the back portion of the head. Attach the eye instrument, to the negative electrode, fill this with pure tepid water, into which the patient places the eye; keeping it open, as much as possible; withdraw the plunger; now the operator holding the positive in one hand, with one or two fingers, (the points,) make firm pressure on the back of the head, a little to the opposite side of the center from the eye under treatment; very gradually entering the plunger, as the patient can bear.

In the treatment of this disease, the whole opposite half of the cerebellum to the eye diseased, together with the cervical vertebræ, will form the points of contact with the positive electrode, and the eye alone, for the negative. Three, to ten minutes at each time, will be long enough to treat.

I would here remark, that this disease appears in all variety of stages, from that of a few days to many years, from mere dimness of vision, to confirmed blindness; and hence requiring a proportionally longer, or shorter period of time for cure; from two, to forty or fifty treatments; at the same time, it is but just to say, that there are but a small proportion of the cases who are not entirely blind, but can be cured; and even those who are, our experience leads us to assert, that a fair proportion of such, by a thorough course may be; notwithstanding the experience of Dr. Paige to the contrary.

DEAFNESS.

Deafness may result either from a disorganization of the structure of the ear, or, from a paralysis of the auditory nerve. The former, we cannot cure; as we do not claim to possess the power to create an organ, or part that is destroyed; but the latter, can be cured.

The same explanation we gave to the optic nerve, in amaurosis, applies to the auditory, in this species of deafness. The indication in treatment, is also the same, viz: To restore the balance of electricity that is lost, or polarize the nerve.

Treatment. Tie a small bit of surgeon's sponge, tightly on the point of the ear probe; attach this to the insulator, and that, to the negative electrode. Wet the back of the head, as in amaurosis; withdraw the plunger, using primary current. Now take an easy seat, by the side of the patient, resting the arm on something permanent, in order to hold a steady hand; grasping the

car instrument by the insulator, as you would a pen for writing. Introduce it cautiously, through the meatus auditorus extremo, (or external ear,) to the membrana tympania, (or head of the drum,) or as near as the patient will allow. Now direct an assistant, who should be present, to handle the positive electrode, with a small wet sponge, to apply the positive, on the back of the head, between the center, and the other ear; with a very light pressure, gradually increasing, until the pressure is firm and steady. His position should be such, that he can keep one hand on the plunger, as that shoud be handled exceedingly careful. After thus closing the circuit, let the current run five to ten or fifteen minutes. Another polarity is as follows: Seat the patient on the positive, making the same touch with the negative as before, and also the negative where the fifth pair makes its exit, in front of the ear. Again; the positive may be introduced in the throat, by means of the throat instrument.

APHONIA, OR LOSS OF THE VOICE.

This is a paralysis of the nerves of the vocal organs, or larynx. The inferior largugeal branch of the pneumagastric, is the nerve affected. The current of electricity, is pointing inward, and upward, in place of outward and downward; and hence, the nerve is left minus.

To polarize it, place the positive on the cerebellum, as near as possible to the origin of the pneumogastric, while you apply the negative, at the larynx. Treat thus for five, or twenty minutes at a time:

Treat also, with the point of your finger, holding the positive, over the par vagus, from its origin, to the junction of the recurrent nerve, on both sides; while the negative is planted at the lower portion of the larynx. Give more or less general treatment, according to the general condition of the patient, using the outward current.

CASE-MISS E. B., AGED 17.

In the Spring of 1859, came to me entirely speechless, in consequence of Aphonia. For three years and a half previous, she had not been able to utter a single word, either audibly, or in a whisper; notwithstanding she had been treated a large portion of the time, by various physicians. After we gave her the third treatment, she spoke audibly, and after the fifth, could converse quite freely in a low tone; on taking eight, could talk and sing, as loud and long, as any body; remaining perfect at this date, being over three years since cured.

Ladies and gentlemen; Let us, if possible, ascertain why these physicians failed to cure the case. Do you say this is a subject, too abstruse for your investigation, and

should be confined to the province of the medical man? I grant that the medical man should investigate, and understand these grand, fundamental laws of life, health, disease and death; and we consider that man who has not the honor, and courage to investigate any subject pertaining to the life, and well-being of the patient, possessing almost the smallest claims to merit even, as not worthy the patronage of the people, and a disgrace to the fraternity. Yet, whether the medical man does, or does not investigate these things, we think it forms no reasonable ground of excuse, for a neglect on the part of the masses. Do you expect, because your minister preaches, exhorts, and prays vehemently, that you are to be saved by virtue of this, without personal application, and effort on our own part? You know better. You perfectly understand this matter. Scarcely in anything, does the world manifest so much indifference, and little interest, as in the well being of their lives and health. Would to heaven that mankind would wake up on this subject. We hold it to be the duty of every intelligent being, of age sufficient, to take charge of their own health.

The physicians could not cure this case, for the same reason that those physicians could not cure the above case of amaurosis. They did not know what, and where the trouble was. This eternal hacking, hagling, bleeding, blistering, physicing, and puking the body, for sins of which it is not now, nor never was guilty, is a practice, too cruel and wicked, for any intelligent man or woman to be engaged in; and too low and debasing, to be tolerated by any intelligent, refined person or community. Suffice it to say, that in the treatment of this case, we pursued the course marked out in our directions. We simply did this, balanced the two forces of electricity, in the nerves affected.

DYSPEPSIA.

This is supposed by medical writers, to be a disease of the stomach, having its origin there. We take it upon us to say, that it is no such thing. The stomach is only affected, secondarily, the same as any other organ. The same explanation of disease holds good, in this, as in all other cases, viz: a loss of balance. Now, the polarity of the nerves going from the cerebellum to the stomach, being lost, and hence the supply of electricity from the brain being diminished, therefore, the stomach is left comparatively minus or negative, and it follows as a matter of course, that the organ cannot perform its legitimate function properly, and indigestion, or dyspepsia is the result. Ah! says one. Do you mean to say, that electricity has any direct agency in the digestion of the food? We will answer this question as the "Yankees" sometimes do, by asking another. Do you suppose the steam, that bland vapor, has any direct agency in moving that vessel on the ocean? or ponderous locomotive and train of cars? Again: Do you think that thunderbolt, millions of times finer, and lighter than steam, which is no more nor less than electricity, has any direct agency in rending that stately monarch of the forest? and shivering it to atoms, when brought in contact with it?

Arrest the passage of electricity from the brain to the stomach, by means of a ligature around the principle nerves, and you arrest the digestive process instanter; after which, introduce a battery current, below the ligature, into the organ, and the function is again resumed, by which we see, that electricity is the principal agent used by the involuntary powers of the mind, to carry on this function. We say electricity, because if the nervous fluid is cut off, IT will produce the same results, when introduced in its stead. Now in dyspensia or indigestion, there is generally a deficiency of electricity sent to the organ, and in a case of long standing, the cerebellum is also in a negative condition; hence, you will perceive, that the seat of the dyspepsia is in the brain, and the stomach is suffering secondarily. This state of things may arise from two causes, viz: mental and physical. Mental, when the mind is over-exercised or

over-taxed. Physical, by the introduction of undigestible substances into the stomach, or gormandizing, excesses in eating and drinking. These causes should be strictly avoided by the dyspeptic. Let this be your first injunction to the patient, after which proceed to the cure as follows:

General treatment with the outward current:—Seat your patient on the positive electrode, giving the body treatment with negative, cerebellum and all; closing, by placing the feet on the negative, and treating the limbs with the positive. Pursue this course once each day, for a week; after which give special treatment as fol-Make the cerebellum and spine, as low down as the stomach, together with the tongue, and the organ alimentiveness, the points for the positive; treating the stomach and liver, with the negative. When treating from the tongue, use the spoon attached to the insulator, instead of the throat probang. Treat from some of these points at one time, and others at another time. As a general thing, it will be advisable to give the special treatment, one day, and the general the next. If the case is of long standing, and requires a good deal of treatment, after treating two or three weeks, it is well to suspend treatment for a few days, or weeks; and then resume it again. We have known the worst of cases, of many years standing, after resisting all other methods of treatment, to yield to this in from one to six weeks, completely.

DIABETES.

This is a disease, characterized by great augmentation and often apparent alteration in the secretion of nrine; generally accompanied with excessive thirst and emaciation. This is one of the diseases refusing to yield to the common methods of practice. Allow me again to call your attention to the fact, that disease is a loss of balance of the two forces of electricity, &c. The organs in this case, having lost their balance, are especially the kidneys, bladder and skin. The former being in a positive, and the two latter in a negative condition. Commence by giving general treatment with the outward current, in order to bring the surface under the head, or positive influence, which done thoroughly, and your cure is one-half accomplished.

For special treatment:—Throw the current in, at the kidneys, and bring it out, at the bladder. By this means you change the electrical condition of those organs, when the cure is accomplished. This disease usually yields to from three, to ten treatments. Alternate the general, with the special treatment. A good practice in this case is, to give a general treatment in the evening, and special in the morning.

DROPSY.

This may be either general or local. When general, it is termed *Anasarca*, when local, it takes its name from the part affected, as Hydrocephalus, when in the head: Hydrothorax, when in the chest; Ascites, when in the abdomen, etc.

It consists in a preternatural collection of serous fluid, in any cavity of the body, or in the areolar texture, and in its passive or most common form, is the result of an electrically negative condition of the absorbants, and secretory organs and glands; and of the skin. In general dropsy, the whole system is more or less at fault, and hence your treatment must be mainly general, making the eoccyx, and throat, the points for the positive electrode, and the entire surface for the negative, with an occasional downward treatment to the feet. You are doubtless aware, that by the above method, you make the current of electricity observe the material or healthy direction, viz: outward and downward. In special dropsy, you must, by a eareful electric diagnosis, ascertain the exact negative points, and besides giving general treatment, make special application to those parts; running your current from the origin of the nerves going to supply the organ, or part, as near as may be, to the organ, or part, by which method you change the electrical polarity of the particular organ or part concerned; and thereby having removed the cause of the dropsy, it must cease.

CHRONIC RHEUMATISM.

The chief characteristic symptoms of this, differ from those of the accute. The accute, being attended with unusual heat, redness, and lancinating cutting, tearing and rending pains; whereas, these symptoms, denoting a positive condition in accute, are wanting in the chronic form; hence as a general thing, the parts affected are, in a negative electrical condition. There are often very harrassing pains accompanying chronic rheumatism, but the pains are of an entirely different character, from those attendant on accute: which difference will be defined when we come to speak of neuralgia. There is also many times, more or less swelling attending this form, but this is not in consequence of a present, positive condition, as we witness in the accute form; but is in general the result of an effusion of coagulable lymph, which tends to produce permanent thickening of the parts. As in the accute, so in the chronic, the disease is apt to shift from point to point. This being the case, we must therefore have more reference to general treatment, than we would were it confined to one particular locality, during its entire course. Very much is to be

done in the cure of this disease, by means of general treatment, as the entire system is more or less out of balance. A gentleman once came into my office, suffering exceedingly with sciatica, of years standing. He being in a great hurry, (his professional duties pressing,) I consequently only gave special treatment to the limb: a day or two after, he came in, (in a hurry again,) and said his limb felt a little easier, and wished another 'touch,' as he had but a spare moment; after receiving which, he left. On coming for the third, I told him, hurry or no hurry, he must submit to my method of treatment, or I should treat him no more; he readily consenting, I gave him a general treatment, to accomplish which, required some thirty minutes; which completely arrested the disease. I heard from the case months after, and was informed by him, that he had no farther trouble, although he had many times unavoidably (being a physician) exposed himself severely.

Treatment:—In giving the general treatment, use the outward and downward current. This should be repeated according to circumstances; in some cases more, and in others less frequently; exercising your own judgment. When the disease is located at a particular joint, it is a good practice to pass the current through and through, in various directions, and thus break up the inactive and torpid condition of the part; after which,

you are to restore the electrical tone of the joint or part, by going to the great "Broad Way" of the nervous system, viz: (spinal column,) with the positive, while using the negative, on the part affected.

EPILEPSY.

In order that you may clearly understand the nature of this disease, we shall divide it into two stages, viz: that of paroxysm or fit; and secondly, remission or interval.

The electrical condition of these two stages is entirely different, the one from the other. In the paroxysm, the brain is highly positive; while in the interval, it is negative; therefore the treatment is to be regulated accordingly.

Treatment:—In the paroxysm the treatment is to be the same as for apoplexy, with this difference; treating the spine less, and the head more. After closing the circuit as in apoplexy, treat the entire spine, not more than two to four minutes, with secondary current; then wetting the head thoroughly, switch on the primary, and treat that with a light current, until consciousness begins to return. The time to cure the disease, is in the interval. You must now carefully diagnose the case, to ascertain whether any of the internal organs are at fault, which is often the case. If so, they must be met by ap-

propriate treatment, regulated according to their electrical state or condition. The brain and spinal column being in a highly negative condition, must consequently be treated with the negative electrode; placing the positive, at the feet and hands. By this method, I grant, that you will at the time, rob the extremities; but it will only be temporary; for as soon as you establish a healthy electrical condition in the brain, and spinal marrow, they, being the great centers, will distribute the current again to the extremities.

Epilepsy of long standing, often requires weeks or months, in which to effect a cure; and yet I have known them cured, even of years' duration, in a few days. A gentleman, between fifty and sixty years of age, once came to me, who had been afflicted with it for over ten years; and said he had paid sixteen hundred dollars to get cured, but had failed of the cure. After taking treatment about three weeks, he was discharged, cured. Nearly two years after, he wrote me saying, he had not had a fit or any appearance of one, since he left me; and begged of me to publish to the world, that the great desideratum for epilepsy, had at last been discovered. You are not to expect to cure all cases, for all cannot be cured; but this fact should not intimidate or discourage you, inasmuch as no other medical practice extant, can cure five in a hundred cases; while our experience leads us to the belief, that by our method, from fifty to seventyfive per cent. of the cases may be cured, by a thorough, and proper course of treatment.

CHOREA, OR ST. VITUS DANCE.

The characteristic symptoms of this disease are, irregular and involuntary motions of one or more limbs, face or trunk; and generally occurs before the age of puberty.

It is in consequence of a loss of electrical balance in the voluntary motor nerves, and as these nerves are under the control of the voluntary powers of the mind, hence the healthy electrical balance of the two brains, (large and small,) is disturbed. The cerebrum, (or large brain,) not receiving enough electricity from the cerebellum, it cannot therefore impart it to the voluntary nerves, and they, to the voluntary muscles, to enable them to move in a natural steady manner, hence the motion is unsteady and spasmodic.

Treatment:—Balance the electrical forces in the two brains; and the disease is cured, and the involuntary motions of necessity, must cease. In this case, you should have recourse wholly, in the spherical treatment, to the primary current; as the secondary, would be too vibrating, to be endured over the cerebrum. The special treatment consists, in treating the cerebellum (small

brain,) with the positive, and the cerebrum (large brain,) with the negative; with a strength of current barely susceptable to the patient, from three to ten minutes at a time; repeated from two to four or five times a week. More or less general treatment is required, with the tonic current, in the case; which should precede, and be alternated with, the special.

CHOLERA.

This is a most formidable disease; and perhaps you are already wondering how it can be reached by means of electricity; which we will soon endeavor to show you. But before proceeding to the treatment, we must understand its nature and condition.

We remark again; that disease, is a loss of balance of the two forces of electricity, in the part. You will please bear in mind, that in the normal condition, the current in the human being is moving downward, and outward; thereby making the inward, negative, and the outward or surface, positive. Now in cholera, the current is reversed, in the whole man; and passing inward, which fact is evinced by the peculiar sufferings of the patient. Let it be borne in mind, that positive electricity, is heat; and negative, is cold; or more properly speaking, electricity is heat, while the absence of it is cold; also, that heat expands, while cold contracts. I say, understanding

these facts, we at once perceive the philosophy of the symptoms manifested in a severe paroxysm of cholera, which are usually the following. In the first stage, a pecular white appearance of the tongue, a sense of languor and debility; some impairment of the appetite; an uneasy sensation of loosness in the bowels; sometimes slight diarrhea, but without pain; coldness of the feet and surface generally; the pulse, if examined, is usually found soft and feeble, sometimes increased in frequency. The symptoms in the second stage, consist of violent vomiting and purging of the rice water fluid, followed with severe cramps of the muscles of the extremities, and other parts; attended with excruciating suffering, with coldness of the surface and extremities; a feeble pulse; often extreme thirst, and a peculiar burning sensation at the pit of the stomach.

Symptoms of the Third Stage, or Stage of Collapse:—Shrunken features; cold, clammy surface; corrugated hands; a leaden hue of the surface; profuse, clammy perspiration; cold, clammy tongue; slow and oppressed breathing, and nearly pulseless wrist; all together present a combination of symptoms, not soon to be forgotten. In the fourth or last stage, the symptoms are: The pulse becomes rapid and quick; mouth and tongue dry and furred; stupor, delirium, and other evidences of disease of the brain supervene. Now let us examine these

symptoms minutely, and we shall see the exact relation they have to the electrical condition of the system at the time; or, the relation of cause and effect. The languor, and feeling of debility, looseness of bowels, coldness of extremities and surface, consequent upon the first stage of the disease, clearly to our mind, point to the fact, that the vitalizing element, electricity, is leaving these parts, and going to the brain and internal organs; while the more formidable symptoms of the second stage, tend to confirm this opinion, and as the reversion becomes more complete, the symptoms necessarily must be more aggravated.

We see also in this stage, a beautiful illustration of the mechanical action of electricity; thus verifying the law we have laid down, to wit: the *invard* end of the current contracts, while the *outward* end expands. How else can we account for the severe cramping of the muscles, in this stage? Who ever heard of a muscle violently cramping, or contracting, while possessing a greater amount of vitality, than it is wont to in health? Nay, this phenomenon is the result of too little, not too much. We pass on step by step, and come to a still more fatal set of symptoms, viz: shrunken features; cold, clammy surface; corrugated (or wrinkled) hands; a leaden hue of the countenance and surface; profuse, clammy perspiration; cold, clammy tongue; slow and oppressed

breathing; pulse nearly gone, &c., &c. And finally, to remove the last vestage of doubt, as it were, in relation to the electrical condition of the system, through the various stages of this fearful malady, and also to show us, that mind is infinitely superior to, and of vastly more consequence than the gross, ponderable body, we perceive that it is the last to be attacked, and hence, is reserved until the last grand scene in the drama, when we have unmistakable evidences, that its citadel (the brain) is invaded, which are, mental aberation, muttering delirium, vitality rapidly ebbing, &c., and finally, death closes the scene. Now then, to briefly review the case.

We cannot, I think, fail to perceive, that in exact proportion as the current becomes inward, and upward, in its course; do the symptoms become agravated, from the very first onset of the disease, to its final termination. The same principle has been illustrated before.

We will very briefly state what we conceive to be the most effective cause to produce this state of things. It is generally conceded, by those whose means of research and clinical experience, have been extensive in cholera regions, that the peculiar state of the atmosphere, in those regions where the disease has prevailed most extensively, has had more to do in propagating it, than any, or all other causes combined; which opinion we coincide with. It is said that, while the cholera

was raging in Paris, a few years since, that a powerful electric, or atmospheric machine, could not be made to produce sparks, for several days, during the heighth of the disease; a singular phenomenon; which was no doubt owing to the fact, that a certain proportion of the oxygen, was wanting in the atmosphere, while it was surcharged, with either sulphurated or carbonated hydrogen gas, or, perhaps with carbonic acid gas. At all events, it is clearly apparent, that some poisonous, negative gas or gasses, not capable of supporting animal life, had in a certain degree supplanted the life-supporting positive oxygen. Now, the atmosphere being received into the lungs, in this impoverished condition, consequently they could not fully meet the demand of the blood, which fact explains the cause of the dark grumous appearance of the blood, so generally found in post mortem examination.

Dr. Jamieson, in his report to the medical board of the Bengal Presidency, says: "The peculiar appearance of the blood excited my attention. In every dissection which I performed, I uniformly found the venæ-cavæ, the mesenteric veins, the veins in the vicinity of the heart, the vena portæe, the iliac and subclavian veins, and the sinews of the brain, loaded by a thick, viscid, and black blood. The right cavities of the heart were generally distended with the same description of blood, and

when any was found in the left cavaties of the organ, it was similar in appearance to that lodged in the right. The lungs were always completely engorged with blood of a pitchy or black appearance, and all the internal viscera presented a greater or less degree of eongestion of blood possessing nearly the same character. The blood-vessels at the external surface of the body, and in the extremities, were generally contracted and empty, or nearly so. It may be inferred that the nervous fluid, in some manner or other, received the first impressions of the eause, and afterward gave rise to this condition of the circulating fluid." Now it is evident to our mind, that the explanation of this appearance of the blood, lies in the fact above stated; viz, by reason of the lack of the positive oxygen, and an excess of some other negative gas. The blood being thus impoverished, the involuntary nerves could not receive the vitalizing principle, electricity, and hence, not receiving it, cannot eonvey it to the brain, and the brain not possessing it, consequently the Monarch or mind, cannot distribute it to the various parts of his empire, the body; the results of which are, the entire man is in a negative electrical condition, comparatively. And therefore, as the supply is not enough to answer the demand of the whole system, hence the more vital parts, must be supplied first, in preference to those less vital to the life and well-being of the man; and hence, we see, in watching the progress of its destruction, this principle is strictly adhered to; the *least* essential parts are deprived first, and passing step by step, taking the next above in the scale of importance, and then the next, and so on until it arrives finally at the brain; (the seat of the master,) and, on accomplishing its terrible work of destruction, the *Master* takes his leave, and death is the result.

"Life's troubled dream is o'er."

Treatment:—By the foregoing description, you doubtless already see the indications in the case, which are, to restore a normal and healthy circulation of the electric fluid, through the entire system; in other words, to balance the two forces of electricity, through the entire man. Place the positive electrode in contact with the coccyx, or lower end of the spine, or still better, attach the rectum instrument to the insulator, attach to the positive, and introduce it within the rectum, (say an ineh,) then with the negative electrode, treat the entire person, from half an hour, to an hour or longer; closing each time or every other time, with light treatment on the head. Repeat this treatment twice or thrice a day, and still oftener, if necessary. There is no danger, as you are using the tonic treatment. In the first stage, once or twice a day will be sufficient, but in the future stages, two to four times a day may be needed. The primary current is the best adapted to this case.

NEURALGIA.

This term is derived from two Greek words, which signify pain in a nerve. There are two kinds of nervous pains, and only two, viz: that eonsequent upon the nerve possessing too much electricity, (positive,) and that, in consequence of it having too little, (negative). When a nerve is entirely robbed or paralyzed, it can endure no pain. Sever the nerves of sensation leading to a limb. then you may mangle, or burn the limb to a crisp, and there is no sensation of pain. Neuralgia, like all the other conditions named, is the result of a loss of balance of the positive and negative forces of electricity, in the magnet or nerve concerned. Prof. Dunglinson says: "All varieties of neuralgia are obstinate, and the greatest diversity of means has been made use of: bleeding, general and local, emetics, purgatives, rubefacients, vesicants, actural cantery, narcotics, mercurial frictions, electricity; destruction of a portion of the nerve, &c. The most successful remedy, perhaps, is the carbonate of iron, given in large doses." Now listen to what he farther says: "This plan of treatment," (I should say the plan referred to is the method laid down for administering the iron,) 'continued for a month ('mark the language' month or two, will often relieve, and ('now see') ultimately remove this much dreaded affection." Mark, he does not tell us whether he means this world or the next. He says farther: 'The mode in which it acts, is by no means clear; but it is almost as certain as any other remedy used in disease, in producing its salutary effects."

Among the many things used in neuralgia, Prof. D. mentions electricity, which like all others, (he tells us) has failed. Why has it failed? We have answered this question in our first lecture, and hence will not stop here to do so. He guesses that large doses of iron, is the best remedy; and tells us if taken a month or two, will often (not uniformly) relieve. Now ladies and gentlemen, who wants to eat carbonate of iron a month or two, (and that in large doses too,) in order to obtain a little, relief from neuralgic pains: when, by a scientific application of electricity, they will always obtain complete relief, in from one, to five minutes. Of the thousands of cases treated by us, I will only mention a single one. While I was lecturing and operating in Buffalo, N. Y., one day Dr. H. came into my office, to inquire if I could relieve a terrible case of neuralgia, and said his wife had been suffering terribly for a week. Said he knew all about electricity, (having used it in his practice over twenty years,) had tried it repeatedly in her case, without the least benefit whatever, and also, all the remedies he knew of, with like benefits. He brought patient in, she suffering intense agony at the time. In three minutes after commencing the treatment, she said she was perfectly free and easy. The next day the Dr. came in to make arrangements for instructions, declaring that the 'Medical Profession' was ignorant of the medical uses of electricity. The first thing is to decide whether the pain is a positive, or a negative pain; and act accordingly, observing the law of electrical polarity.

LECTURE SIXTH.

CHEMICAL ELECTRICITY.

Ladies and Gentlemen :-

We come this evening to discuss the rationale of chemical electricity, in the cure of discase. Chemical electricity or galvanism, as before remarked, is obtained by means of the cups and acid, disconnected from the helix; and is the purest quality of electricity known.

It is to be used in preference to all other kinds, in the treatment of that class, which we denominate unhealthy disease; and also in all foreign or extraneous growth. The first disease we shall notice under this head, is

SCROFULA.

This disease more generally affects the glandular system, and often the internal organs also, as the lungs, stomach, mesentery, &c. It possesses a certain malignancy, in consequence of which, we have placed it in the class of unhealthy diseasc. You doubtless recollect, I told you in a former lecture, that electro-magnetism, or that produced by passing the current through the helix, was not applicable in the treatment of this class of disease; the reason being, that in them, there is a chemical action going on, and no corresponding chemical quality in this current; hence, galvanism, or pure electricity is used, in order to meet this peculiar property of the disease. You will bear in mind, that the amount of electricity used in each case, should be proportioned, to the amount of resistance offered; and the amount of resistence, depends upon the nature of the structure, and virulence of the object to be acted upon.

In the decomposition of metalic solutions, by means of galvanism, you will recollect, that the metal or base of the solution, always appears at the positive end of the current; or negative pole: while the electro-positive element, is found at the negative end, or positive pole; hence, in the treatment of extraneous growths, tumors, &c., you are to act with reference to this law; your object being two fold, viz: First, to break down, or change the structure of the part, and secondly, to disperse it, by absorption. The former is to be obtained, by the negative end, or positive pole; and the latter, by the positive end of the current, or negative pole. Now in nearly, if not all eases, of scrofula, the whole system partakes more or less of the taint peculiar thereto; hence, the treatment must be general. In these cases, where the disease is general, the tendency of the current in the patient is inward, hence, you are to reverse this tendency, by general treatment over the entire person with the outward end of the current, or negative electrode; by which means you not only give an opposite direction to the current, but also promote absorption. The rule for connecting your series, and also the polarity of the galvanic current, are given in the second lecture. This current produces no perceptible sensation to the patient. I should have remarked: In giving general treatment, the coccyx or termination of the spine, and throat, are the points for the positive electrode.

GOITRE.

This is an enlargement of the thyroid gland. It is not an unhealthy disease, not being malignant or poisonous in its nature: but being an unnatural foreign growth, it therefore requires the galvanic current, to disperse it. Some recent cases, and not hard, may be removed by means of the helix current, and, by thoroughly arousing the absorbants.

Treatment:—To act specifically on the tumor, I use the positive there, and the negative electrode on the whole length of the spine. By this course, you deflagrate the tumor, after which you should give general treatment, with the outward current; seating on the positive. This stimulates and gives tone to the whole system, and enables it to take up by absorption, as fast as the other method decomposes; hence, both methods should be practiced at the same sitting; and in the order here laid down. The above is the method to be pursued, whether using the galvanic or magnetic current.

CANCER.

This is to be classed among the unhealthy diseases. Generally, the entire system is impregnated with a peculiar poison in cancer, and hence nothing will do but the purest quality of electricity. The objects and method of treatment, are the same as in the above case.

viz: deflagration and absorption; bearing in mind, however, in deflagrating the tumor, run through as few important organs as possible. A large number of cups may be required to cure very obstinate cases.

FEVER SORE.

After suppuration takes place, the disease is in a negâtive condition. These sores often continue to discharge for a long time, sometimes for months or years. The reason of this is, in consequence of the existence of a poisonous taint, which is to be met before the cure can be accomplished; hence, a good deal of general treatment is required with the cups, or the primary helix current, making polarity the same as in the last case.

For special treatment:—Make the spinal column the point for the positive, and the sore the point for the negative electrode. If there is an orifice in the sore, pass a silver probe into it, attached to the negative: while treating the spine with the positive. Repeat the treatment from twice to five or six times a week, as the case may require.

OPACITY OF THE CORNEA.

This is an extraneous growth, and is generally in consequence of a former inflammatory, or positive condition of the eye. It may or may not, be connected

with an unhealthy condition of the system. If it is, more or less general treatment with the cups will be required; but it not, no general treatment is needed, only special, as follows: The substance being external, attach the eye glass to the insulator, and that to the positive; fill the glass with pure tepid water, and place the eye in the glass; place the negative, (inclosed in a wet sponge,) in the patient's hand, corresponding inside with the eye: treat thus for five, to ten or fifteen minutes at a time; directing the patient to keep the eye open as much as possible, also, place the negative in the patient's mouth, and at the end of spine, alternating from time to time. I will correct what I said above, concerning general treatment. It must be given in order to promote absorption, and may be given with the helix current, repeated two or three times a week.

CATARACT.

This consists in opacity of the crystalline lens, or capsule; which prevents the passage of the rays of light, and precludes vision. This you will perceive is, also, an extraneous growth, its situation, however, being internal, while the other was external; and for this reason, it requires much longer time to effect a cure. This, like the last, is not necessarily connected with an unhealthy condition of the system, and is incurable by

any means known to the profession, except by an operation. It is but reasonable to say, that there are but few eases comparatively, cured even by this practice; simply because they will not continue a sufficient length of time to receive a perfect cure; as it requires months, in cases of hardened cataract. The reason of this is, from the peculiar locality of the cataract. Its position being posterior to the cornea, and sclerotic coats of the eye, and these membranes being exceedingly bad conductors of electricity, hence, it is much more difficult to reach it, than if on the cornea, as in the last case. Notwithstanding all these difficulties, I am satisfied that with a proper course of treatment, they may be entirely enred, even in their ripe condition.

Treatment:—For the removal of cataract, you need a battery of considerable power, from six to fifty pairs of cups; according to the density of the body. Cataract being located internally, you must therefore, so arrange the electrodes, as to make it appear between the two, and, as the positive is the one that deflagrates, hence, it must be placed nearest the cataract, therefore you are to arrange them as follows: Attach the eye glass to the positive, filled with water; into which place the eye. After thoroughly wetting the back of the head, place the negative, on the opposite side of the center, from the eye you are treating. If you are using a strong

current, it should not be contined more than five, to ten minutes at each time; as a longer time would be likely to injure the healthy structures. General treatment will be needed occasionally, to promote absorption; using the outward helix current, if no taint exists in the system, repeating from once, to three times per week.

CATARRH.

This results from a positive condition of the mucus membrane of the air passages. It scarcely elicits much attention in its positive condition, being looked upon as a common cold merely, and hence is allowed to pass almost unnoticed as it were, into the negative or chronic condition; in which state we usually find it. In its first stage, it may be readily removed, whereas in its latter, it is much more difficult, and often assumes a formidable and dangerous appearance, from its liability to involve not only the entire air passages, but the lungs also. The character of this discharge requires a brief notice. Although it cannot be said to be actively poisonous in its nature, like that of cancer, yet it possesses a certain acrimony, which enables it to corrode, and irritate other parts with which it comes in contact; and this is owing to its extremely negative character. It is astonishing to see what multitudes are suffering with catarrh, and although it is seldom cured by the ordinary

methods of practice, yet it is very easily by this method. The primary helix current, will cure a large proportion of the cases; some, however, are so obstinate as to require the pure galvanic. Whichever current you use, seat the patient on the positive, and make the seat of the disease, to wit: the root of the nose, throat, trachea, bronchia, &c., the points for the negative electrode, giving more or less general treatment, to enable the system to absorb, and carry off the foreign matter.

MECHANICAL ELECTRICITY.

The mechanical action of electricity, is as follows: In passing the current through a part of the body, the first, or negative half, contracts; and the last, or positive half, expands the body or part through which it passes; and, also, the relative contraction, and expansion of the parts are equal; so that the absolute length of the part is not changed, but the relative only. Now, it is in view of this principle in electricity, that we are to use it in deformities, curvatures, prolapsed organs, contracted muscles and parts, etc. The first condition we shall speak of under this head, is

LATERAL CURVATURE OF THE SPINE.

Where this is in consequence of a destruction of the important muscles concerned, it cannot be cured; oth-

erwise it can. This is in consequence also, of a loss of balance in the parts concerned.

Treatment:-In the treatment of this case, you should first act upon the negative, contracted set, for a few treatments, as follows. Introduce the throat instrument, attached to the positive, and with the negative, or outward, treat these muscles thoroughly; say for two, to four or five times, after which, reverse the electrodes, and treat the expanded muscles a few times, then treat both sets at a time, as follows: Take the insulated sponge in one hand, and the other electrode, (inclosed in a sponge,) in the other; placing them in apposition, the positive on the expanded, and the negative on the contracted side of the spine, with a firm pressure and strong current, treat the parts involved; keeping the electrodes opposite each other. Finally: Place the positive firmly on the trapezius muscle, (situated at the posterior part of the neck and shoulder,) on the side corresponding with the concave portion of the curve, and with the negative, treat the convex portion. By following the above directions, ninety per cent. of all the curvatures may be made straight, and often with from two to a dozen treatments. My students are many times, almost frightened at the success in these cases.

STRABISMUS, OR CROSS EYE.

This may be natural or acquired. If the former, you will not cure it, but if the latter, you can readily. It may also, occur in consequence of a spasmodic action of one of the rectus muscles, which is readily cured. Perhaps I cannot better illustrate this, than by referring to a case of this description, which occurred in my practice several years since. A lady came into my office, with the eye rolled outward under the temporal bone, so far as to hide the entire iris from view, an occurrence of some three months' standing; yet otherwise enjoying good This was in consequence of a loss of electrical balace in the nerves supplying the rectus internus muscles of the eye. The inner had become positive, expanded, and the outer contracted, negative. The inner, represented the head, and the outer, the tail of the current. Now the only thing to be done, was to change the polarity of these nerves and muscles, which was done in five seconds, in the following manner.

Taking two ear probes, and attaching them respectively to two insulators, I directed the point of the positive within the inner canthus, until it reached the attachment of the inner rectus muscle, also the negative one, within the outer canthus, in the same way; after which, a very gentle primary current from the helix, was made

to traverse the instruments, when the organ immediately assumed its natural position.

SPURIOUS CONSUMPTION.

From close and careful observation of nearly twenty years, as a medical man and electrician, I am satisfied, that not more than one-tenth of those supposed to have consumption, (according to the popular acceptation of the term,) have any such thing; having lived and died, themselves and their friends being deceived, in relation to their real condition; and thus, tens of thousands are annually being swept from time into eternity. Perhaps this idea may astonish you, (for who has not lost a friend by means of this destroyer?) And yet I verily believe it is as true as strange.

Doubtless you are already wondering; What then is it, that is making such terrible havoc among the race? The answer to this question is, they are dying because they do not and cannot breathe; or in other words, the lungs have not room for free play. Now let us examine this subject carefully, and ascertain, if possible, the facts in the ease. Far too much stress has been placed, and pains taken by the American people, to cultivate a delicate and graceful form, in the person of the offspring, especially the female portion. As though the Almighty had made a grand failure in the formation of your child,

therefore you propose to take the matter into your own hands, and put on the grand finishing touch; which he fails to do. It is generally conceded, I think, that little children, until they are at the age of five, six or seven years, look as well, or better, to be plump, florid, or active and buoyant, jumping and romping, in doors and out, full of health, vigor and happiness. We say all this is generally tolerated, and even cultivated during the few first years of their existence, in both sexes, alike. But lo! and behold! mothers begin to think that their little girls need to be trimmed up a little, or put in a little better form, and hence certain appliances are brought to bear upon them, with reference to this end. Their garments must be tightened a little, and they kept in doors; their coarse, boyish ways and amusements must be laid aside, and they must now be manufactured into little ladies; and hence, the process commences and progresses, not meaning (of course,) to really injure the permanent health of the little one. No, no, far from it; for no mother would knowingly do that; and thus the work of trimming and crimping goes on, until the plump, florid, rugged and heathy little girl of six or eight years, (if she happens to have vitality enough to endure the process,) comes to be the trim, genteel, delicate, pale and beautiful young lady of fifteen, sixteen or eighteen. The mother, yes, and many times, the father too, are

delighted at having so well accomplished their object; are flattering themselves with the false idea, that their daughter is now, all fitted up for the fashionable circles, a long life of pleasure and happiness; when, perchance, a slight, hacking cough from the fair one, grates on the ear of that fond parent. Little or no attention is paid to it; but as days or weeks pass on, the cough increases, with slight pains in the side, chest, or head; with more or less restlessness in sleep. The fears of the parents begin to be aroused, when they resort to some simple means, believing it to be nothing serious; but finding these to fail, the physician is summoned; he prescribes some simple remedies, thinking, perhaps, the symptoms will soon yield; but no, they continue with a steady onward march: the whole materia-medica is ransacked, in quest of something whereby to arrest the march of the fearful monster, (supposed consumption,) but all to no purpose; the edict has gone forth, and cannot be revoked. "The wages of sin is death:" an immutable law has been violated, and the death penalty is approaching, all efforts and anxieties to the contrary nothwithstanding; and in a few short weeks, or months, all is over; death closes the scene. You, your neighbors, doctor and all, suppose the person died with consumption; and as you look with bleeding heart and tearful eyes, on the lovely and beautiful form of the loved one; you feel to

repine, and wonder at the providence of God, perchance exclaiming: "Why should he be so ernel! to take her, (or him,) in the morning of life; when we had taken so much pains to train, and fit her for the enjoyments of life and happiness. Oh! how mysterious are the providences of God!" And, to put on the climax of absurdity, the parson, in performing the last solemn funeral rights of the deceased, perchance, chooses the text:-"The Lord gave, and the Lord hath taken away, blessed be the name of the Lord." We should have said, prior to the burial services, permission was obtained, and an examination had; which reveals the fact, that the lungs are not consumed, or gone, but in an exceedingly contracted form. On removing and inflating, however, they are soon made capable of expanding to their normal size. Now then, the patient having all the appearance of consumption, and yet the post mortem, showing the lungs comparatively healthy, what, therefore, was the cause of death? That this is a question which should deeply coneern the whole world, at least the American people, I think none will deny; and to the best of our ability, we will answer it.

The lungs were made, and adapted to the atmosphere; with a capacity for inhaling a certain amount of atmospheric air. The blood, and other parts of the physical system, require a given amount of electricity, to

develop, and make them healthy. The electricity is contained in the oxygen of the air; and has no means of communication with the internal man, but by the lungs; hence, if by any means, they are rendered incapable of receiving it, the consequence is, they cannot transmit it to the system; therefore, the system must be without it; and hence, the electricity being the grand vitalizing element of the system, it follows, therefore, that the vitality and development of the system, must sink in the same proportion that this is withheld; and, sooner or later, death from exhaustion, must ensue. Now to illustrate this, let us refer to the case in hand, and I think we shall perceive, that whoever else was guilty in the premises, God was not.

We see the little girl. up to the age of six or eight years, full of life, vigor, health, and happiness; she is breathing rightly, and receiving, and appropriating her full quota of oxygen and electricity; but, as the trimming and cramping process is pursued, the health, bloom and vigor begin to leave; until finally, that rosy cheek has disappeared, until a pale, marbled appearance takes its place, and the whole train of symptoms above described. In short, you have effectually, (though by no means intentionally,) I will not say killed, but deprived the child of life; literally starved her to death, by indirectly withholding the vitalizing element, electricity;

which has been done, by contracting the cavity of the chest to such a degree, that the lungs were unable to receive more than from one-quarter to one-half the oxygen demanded by the system; the consequence is, death from starvation; which we suggest, would be a far more appropriate text to be used at the funeral obsequies, than the one quoted.

But to return to the case: When friends are alarmed and all anxiety, remedies are powerless; and in spite of all, death making rapid inroads; and the case hastening on to a fatal termination; thank Heaven, we come even at this critical moment, to offer you a remedy; not in the form of cod liver oil, hypophosphate of lime, syrup, or anything of the kind; as we believe none of these are indicated: but one, based upon an immutable law; upon rational, common sense principles; and one that will reach the case too, unless the encroachment has been carried to such an extent as to put the parts beyond the reach of an active response; and that remedy, is none other than *Electricity*.

Now, the real condition of the case, is MECHANICAL CONTRACTION of the chest and diaphram; resulting, in consequence of the peculiar process of crimping, trimming and training, to which the case has been subjected; all of which has had the tendency to reverse the electrical condition of the system. The respiratory nerves and

muscles, not being fed, have contracted upon the ribs, and they upon the lungs, until they have become so cramped as not to be able to move; and finally, death is the consequence.

Treatment:—The important thing to be done, is to overcome this contraction and expand the chest; which is to be accomplished by using electricity, with reference to its mechanical action. The point for the positive electrode is the spine, between the middle cervical, and middle dorsal vertebra; and for the negative, the entire front, and sides of the chest and diaphram. The general, tonic treatment, is to be used in connection with the chest, and give tone and vigor to the system.

PHTHISIS PULMONALIS, OR REAL CONSUMPTION OF THE LUNGS.

That this disease may, and does sometimes exist, we do not deny; but that it is a common disease, we do not believe; as we have before said. This consists in the formation of tubercles in the lungs, which sooner or later soften and ulcerate, accompanied by a certain poisonous taint, which must be met by the chemical electricity, or galvanism. The method of treatment is the same as in the other kinds.

ASTHMA.

Difficulty of breathing, recurring at intervals, accompanied with a wheezing sound and sense of constric-

tion in the chest; cough and expectoration. These symptoms are the result of a partial paralysis, or negative electrical condition of the respiratory nerves; and, in a large proportion of the cases, we find the chest in the same contracted condition, as in spurious consumption. The same method of treatment is required as in that; with the addition of running the current more or less, from the cerebellum, to the respiratory nerves and muscles.

Mr. R. came for treatment, while I was lecturing in Oswego, N. Y.; suffering extremely with asthma, with which he had been afflicted for a number of years. A few days previous, he had suffered a most terrible paroxysm. His physician was summoned in haste, stood, looked on and said he could do nothing for him, thought he would die in the paroxysm.

When he came for treatment, it was truly painful to see him labor for breath. I found the large pectoral and respiratory nerves and muscles, in a complete negative and contracted condition: patient could not by any means, sit or stand in an upright position. He received eight treatments, when he declared himself well, being nearly as erect and elastic, as when a young man—(yet being about seventy years old.) I pretend to say, that no case can be treated strictly according to the principles laid down, without being greatly benefitted, and

nearly all cases will be cured, if treated a proper length of time.

RETENTION OF URINE.

We shall only refer here, to that species where the urine is accumulated in the bladder, but unable to pass, in consequence of contraction of the mouth of the organ. Case: Mrs. B——, of Buffalo, N. Y., being in this condition some twenty-four hours, notwithstanding the most active and energetic exertions of her physician, was relieved in two minutes, by the following treatment.

The lumbar vertebrae were made the points for the positive electrode, while the negative was being used over the bladder, in front, just above the pubic bone. By this means, the organ was brought under the head, or expanding end of the current; and thus the contraction overcome, and relief obtained.

ASPHYXIA, OR SUSPENDED ANIMATION.

This takes place in consequece of the lungs not performing their legitimate function of respiration; therefore, oxygen and electricity, (being the connecting link in the animal economy,) being withheld, the patient dies in consequence.

Treatment:—Pass the current in at the cervical, and upon dorsal vertebræ; and bring it out at the lungs; or, by means of electro-puncture, with a gold or silver needle,

enter the par-vagus nerve, at the side of the neck. This latter method, I would advise none to attempt but the practical anatomist, although a successful method. We see in this, how infinitely important the lungs are in the animal economy, and that they do in reality occupy, the position we have assigned them, viz: that of connecting man with the external world.

TRISMUS, OR LOCKJAW.

This consists in a permanent contraction, or negative condition, of the muscles of the jaw. This is a very simple condition, and only requires an electrical change in the muscles concerned, when the cure is accomplished. Bring these muscles under the head of the current, by the use of the negative electrode.

LECTURE SEVENTH.

Ladies:—I am exceedingly happy in the thought of being permitted to address you this afternoon, on the subject of health. We appear before you to discuss that class of suffering peculiar to your sex. A subject which in our judgment, has not hitherto received that share of attention which its importance demands; a subject which should engross the most earnest and candid attention of every female in the land. "We live emphatically in an age of investigation and improvement, when light seems to be pouring in oceans on our world; and he who shuts his eyes, and then scoffs and sneers because others open theirs and see, is not only recreant to duty, but does society an irreparable wrong." History informs us that people lived anciently to a much greater age than at the present time. A person then, at the age of one or two hundred years, was scarcely considered in his prime; and even in modern times, many instances are recorded, where they have lived from one hundred to one hundred and forty, fifty, and even sixty years; thus showing that man possesses most clearly all the clements of longevity. And yet, how terrible the thought, that now, the days of the years of his life will scarcely average one score years and ten. Sir Walter Scott once remarked to his physician: "We are a machine made to live. Do not counteract the living principle, by your drugs." It will not be expected in the time allotted me, that I can enter into all the diseases to which your sex is liable, hence we shall confine our remarks in this lecture, to those most common, and grievous among you. The first condition we will name is,

PROLAPSUS UTERI, OR FALLING OF THE WOMB.

This may be considered the canker worm, gnawing at the root, and sapping at the foundation of female happiness and life. I am satisfied, from close and careful observation, and long experience, that there is no one cause found, in the whole catalogue of human casualties, that is so effectually operating to undermine and destroy the health and lives of the fair sex, as this. It is difficult to find a lady nowadays, over twenty years of age, who is not suffering in a greater or less degree, from this condition; and yet, very little comparatively has been done by the medical profession, to alleviate and cure it. True, many things have been done, and appliances made, in the form of mechanical supporters, both internal and external; and yet we ask: What proportion of cases are radically cured by these means? If any, they are so small in number, as scarcely to be worth naming.

Now, ladies, I beg leave to enter my protest, henceforth and forever, against the use of the external supporter, in this condition; and for the following reasons. First: If you will examine the anatomical structure of the female pelvis, you will perceive it is constructed somewhat in the form of a basin, from which it takes its name, and is composed of five bones; the sacrum and coccyx behind, illium on either side, and pubic in front. The different diameters of the cavity, including the soft parts,

are as follows: The autero-posterior diameter, or, from the pubic in front, to the sacrum behind, is about three and a half inches; while the lateral, or that from one side to the other, is about four inches. In this cavity, are contained the bladder, womb, and rectum. Now, if you will take notice of the locality and position of these organs, you will perceive that no pressure can be made in front, about the pubic bone, by a pad, without pressing the contents of the pelvis downwards; for the reason, that the pressure is made above the organs; hence, there is no physiological adaptation in the external supporter, but a decided and positive injury. You will please bear in mind, that the womb represents an inverted pear, and is supported by means of muscles and ligaments. Now let us turn our attention again to the question, what is disease? and also to the mechanical action of the current, and we shall not only see the philosophy of the condition, in prolapsus, but the rationale of cure. Disease, as we have often had occasion to remark, is a loss of balance, &c. In the case before us, the muscles and ligaments, are in a positive electrical condition, which condition always expands; and represents the head of the current. This being the case, hence the organ having no other support, must consequently fall from its normal position. In prolapsus, the organ is not necessarily at fault itself, by any means. The indication in cure is, to restore the balance of the forces in the ligaments, or polarize the parts, to do which you should observe the following rule, viz: Having reference to the best nervous communication, place the positive electrode at, or as near the lowest point of expanded muscle and ligament, as you can. Secondly, close your circuit, by placing the negative back, and above the positive, and at such a distance from it, as shall make the entire expansion appear between the positive electrode, and center of the two. Explanation: Your object being to produce contraction in the expanded parts, and as the first half of the current contracts, hence you should arrange the electrodes in such a manner as to bring the expanded parts, within the contracting portion of the current.

Now, let us apply this rule to the case before us. First: Having reference to the best nervous communication, &c., where would that be in this case? Ans:—Internally; hence attach the curved womb instrument to the insulator, and this to the positive pole. Introduce this into the vagina, until the metalic ball forms contact with the womb; directing the patient or assistant, to hold it by the wooden, or insulated portion. Secondly, the rule says, place the negative back and above the positive, at such a distance from it as shall make all the expanded parts appear between the positive and the center of the two. Quest: Where would that be? Ans: To

illustrate; suppose from the os uteri, or point of contact of the positive, to the upper point of the expansion, to be six inches; it follows therefore, that the negative must be placed on the spine, at a distance of twelve inches from the positive, or six from the center. Should you get the negative, say one inch too low, making only eleven inches in space, you would thereby change the electrical center half an inch, and thus fail to completely raise the organ. Perhaps you are ready to ask: How shall we, who are comparatively ignorant of the structure , and mechanism of these parts, be able to judge exactly, how much space is involved, and hence, make a correct touch with the negative electrode? Your question being both very proper and important, we take great pleasure in answering it.

Suppose, as we before said, the parts involved occupy a space of six inches, and you close the circuit by placing the negative twenty-four inches above the positive; there will be no danger or evil arising in consequence, from the fact that, as soon as you break your circuit, the healthy parts will balance themselves again; hence you are to bear in mind, to place the negative high enough, and not a particle too low. I will here make mention of barely one case, who was treated according to the above directions.

Mrs. -, of Buffalo, N. Y., was taken while I was

operating in that city, a few years since, violently with prolapsus uteri; and not willing to again submit to having it replaced by manual force, an operation which she had passed through some twenty-four times, during the last ten years, we were called to see the case.

We found her suffering intense agony. Upon examination, the organ was found to be just within the labia. After closing the circuit as above directed, the organ moved to its place in half a minute, and the patient perfectly easy. I hesitate not to say, that a simple, uncomplicated case of prolapsus uteri, however bad, may be reduced without any inconvenience, or pain to the lady, in from one, to five minutes, in nine hundred and ninetynine times in a thousand, indeed, we do not recollect to ever, have seen a failure, where those principles were strictly followed.

DYSMENORRHOEA, OR PAINFUL MENSTRUATION.

Although this condition may not be attended with any real danger to the patient, yet it is extremely annoying, and many times very painful. It is in consequence of a negative condition of the nerves, going to the neck of the womb; hence the neck becomes contracted, and remains so, until the catamenial secretion, becomes coagulated in the organ, when the latter contracts upon it and forces it through the mouth, at which

time, and in eonsequence of which, the pain is experienced.

The cure, eonsists in relieving the spasmodic contraction, which is to be done by changing the electrical polarity of those nerves. Bring them under the action of the head, or expansive end of the current, using the same instrument as in prolapsus, attached to the negative electrode, and with the positive, treat on the spine, over the lumbar vertebrae. You will perceive, the treatment in this ease, is exactly opposite to that for prolapsus; for the reason as you will readily see, that the electrical polarity of the two, is opposite.

MENORRHAGIA; IMMODERATE FLOW OF MENSES, OR FLOODING.

This is a formidable disease, and often exceedingly dangerous; from the excessive loss of blood; and requires the most prompt means for its arrest. It is in consequence of a loss of electrical balance, in the nerves supplying the womb, having become positive or expanded, hence the mouths of blood vessels of the internal surface of the organ, must be expanded, (as heat expands) and the result, is flooding. When we contrast the popular practice, with that which we are about to submit, we think none can fail to see the advantages, of the latter, over the former, in two very essential points at least, viz: in time saved, and direct application.

While the means ordinarily used, as external applications over the parts, internal astringent injections, tampon, etc., to say nothing of their insufficiency, must of necessity require more or less time in their action, in consequence of not being applied directly to the parts at fault; and thus precious moments, upon which hang the destiny of the patient, are lost. The latter method, offers a specific, going with the rapidity of lightning, directly to the part at fault; producing its effects instantaneously, and without inconvenience to the patient; acting not in an arbitrary, manner but upon natural, philosophical laws. And this remedy is none other than electricity.

Now, when we consider man, as an electrical being, and each separate nerve as a magnet, governed by the universal law of electric action, to which all other magnets are subject, and fully understand the law of electrical polarity, the nature and functions of the positive and negative forces, and that all the functions, operations, and changes of the physical, ponderable body, are under the control of these laws; I say, taking this view, it seems to me we have a basis upon which to establish a theory of disease, and rationale of cure, that will bear the closest investigation, and scrutiny of the really learned and scientific; and we hesitate not to say, the closer, and more thoroughly these laws are investigation.

gated, the more brilliant and beautiful will they appear. But to the case in hand: The termination of the nerves and bloodvessels, of the internal surface of the womb, have become surcharged with electricity, (or heat,) and as that expands, hence the mouth of these vessels are opened, and their contents being poured into the cavity of the organ. Now the one thing to be done, as you will readily see, which is also acknowledged by all practitioners, is, to close up the mouths of these exposed vessels. On this point we all agree; but on the method of doing it, we are as dissimilar and diverse as the poles; only, in consequence of a lack of knowledge and understanding, of these grand laws and principles.

Treatment:—Introduce the womb director, attached to the positive electrode, within the organ, (if the mouth, or os is dilated,) but if not, to the mouth. Close the circuit with the negative on the spine, on either the sacral or lumbar region, by which you bring those nerves, and exposed vessels, within the inward or contracting portion, and changing the polarity from positive, to negative, from expansion, to contraction; hence, the hemorrhage must of necessity cease.

AMENORRHOEA.

When females pass the age at which the monthly periods should appear, this is called amenorrhoea. The

time for the establishment of this function varies. In some, it commences at the age of twelve, with others, at fourteen, and others, at sixteen. Perhaps the average, may be stated at fourteen. This disease may result. either from a general or a local cause, from a want of sufficient vigor and vitality, in the sytem at large, or from some local, organic derangement. These two causes are to be duly considered, and the treatment applied accordingly. You are not to set it down as a positive fact in all cases, because your daughter has arrived at the proper age, and the function not established, that her ease is dangerous, or even alarming. This is not necessarily the case, yet you should keep close watch, and upon the slightest departure from health, ascertain whether it may not be in consequence of something wrong in this direction. Where the age in which the courses should make their appearance has arrived, and the lady's health is impaired, you should, by a careful diagnosis, ascertain whether there is any organic disease of the generative organs; which is acting as a hinderance to the establishment of the function; and if so, it should be removed by appropriate electrical treatment, directed according to the electric condition found; but in case you do not find any particular organic trouble, you are to direct your treatment with reference to the general condition of the patient. Where this function is delayed in consequence

of a constitutional inability, on the part of the system generally, (as is more usually the ease,) it is because the system as a whole, is in comparatively a negative eondition; and hence the tonic treatment is indicated; directing more or less special treatment, (unless contra-indicated,) to the organs of generation, by means of the womb instrument attached to the negative electrode, and introduced within the vagina; and treating the whole length of the spinal column with the positive.

LEUCORRHŒA, OR WHITES.

In leucorrhæa, there is a more or less abundant discharge of a white, yellowish, or greenish mueus, which is the result of a negative condition of the mucus surface of the vagina or womb, and often both. After it has existed for a length of time, it partakes more or less, of a poisonous taint, and hence requires the galvanic, or chemical current to cure. The method of operating, is precisely the same as in the preceding case.

NOTICE TO THE PUBLIC.

The author wishes to say, that in the treatment of disease by means of electricity, although the theory by which you are guided may be perfect, yet without proper machinery you cannot expect success; hence it is of the utmost importance, in order to the greatest success, first, that you have a sound theory; and then the right kind of machinery. He has examined nearly all the various kinds of Electro-Magnetic machinery, which have been manufactured in this country. There are many machines nowadays, claiming to possess four or six different currents, which only exist in name, as but two distinct currents can be obtained from the same helix, viz: the first or primary, and secondary or induced. Again; there are many claiming two distinct currents, while they actually possess but one; hence, as it is not easy for those macquainted with electrical apparatus, to detect these differences, we advise the use of no kind except our own, and shall not consider ourselves responsible for the failures resulting from the use of other kinds.

Prof. W. R. Wells' Double Current Electro-Magnetic Machine; manufactured by Dr. Thomas Hall, Manufacturing Electrician, No. 13 Bromfield street, Boston, Mass., can be obtained at the manufactory, or of the author; at the following prices: Machine, without a case of Treating Instruments, \$14.00. Machine, with a full, complete case Treating Instruments, \$20.00.

That other kinds of Electro-Magnetic machines, may sometimes relieve pain, or cure some slight disease, we doubt not; but they are exceedingly uncertain, and doubtful in their action, we are perfectly assured; and hence cannot recommend them to the student.

In conclusion he will say, that nowhere in his work, does he give any direction or authority for *shocking* the patient; but on the contrary, he strictly and wholly repudiates the idea. If the rules laid down in the work are strictly followed, there will be no unpleasant sensation whatever attending the treatment. He would also say that he fully believes, that in every application where the rules *are* strictly followed, more or less benefit will result, and that it will cure in all curable cases, when fairly tried.

AUTHOR.

The following are a few of the Complimentaries received by Prof. Wells, from his classes.

COMPLIMENTARY.

BUFFALO RESOLUTIONS.

We, the undersigned members of a class, have listened to a course of Lectures and Instructions delivered in our city by Prof. R. W. Wells, on the subject of Electricity; and feeling it to be not only right and proper, but highly obligatory on us to express our views in relation to the same, would therefore say, that we have listened with the most profound and increasing interest to the Doctor's course of lectures. His theory of disease and cure is new, beautiful, rational, and scientific. He has clearly demonstrated to our entire satisfaction, as well as to the satisfaction of the many who have been cured of obstinate diseases, that electricity, when used in accordance with certain laws and principles as taught by him, is capable of performing the most astonishing cures known to the medical world. That the Professor's theory is new, and unknown to the schools of medicine, is beyond all question. It is eminently worthy an important position in the ranks of medical science, and no physician should be without it.

In behalf of the class.

I. J. MEECHUM, Chairman.

Buffalo, March 8th, 1859.

OSWEGO RESOLUTIONS.

At the close of a course of Lectures delivered in our city, by Prof. W. R. Wells, on the subject of Electropathy,

the members of the class passed the following resolutions, nuanimously.

Resolved, That we have been deeply interested in the system of electropathy as taught by Prof. Wells; that he has taught a New, Rational, Scientific, and we believe,

the most Valuable theory of disease and cure.

Resolved, That in our judgment, the views advanced and so clearly proven by Prof. W., are not only new to those outside, but to the medical profession also; and that no person is prepared to do justice to the patient, without a knowledge of these great and important laws.

Resolved, That we most cordially commend the professor and his theory to the public, and bid him God speed, as we believe his mission is one of benevolence

and mercy, and calculated to benefit mankind.

By order of the class.

A. J. Phelps, Chairman.

Oswego, January, 1861.

COLUMBUS RESOLUTIONS.

At the close of the second course of Lectures on the questions: What is disease, and what is its remedy? delivered in our town by Prof. W. R. Wells, the pupils in both classes unanimously adopted the following preamble and resolutions:—

Whereas, We have enjoyed the opportunity and pleasure of listening to the able and interesting lectures of the professor; and whereas, we believe in letting our

light shine for the benefit of others, therefore

Resolved, That we believe the questions: What is disease, and what is its remedy? have in our opinion, been ably and fully answered by the professor, in accordance with that law by which God governs the universe of mind and matter, and is as unchangable as its Author.

Resolved, That we hold to the doctrine that unbelief and ignorance are no match for faith and knowledge;

hence, we are not to be cowed down, nor moved from the rock on which our feet are placed; by the cry of humbug, coming from those who have never investigated this subject, and have not the manhood and ingeniousness to do so.

Resolved, That it is due from that class of persons known as the medical faculty, in whose hands to a great extent are placed the health and lives of the community, that they do most thoroughly and honestly investigate this subject, and expose its falicies, if any it has, or adopt

its principles.

Resolved, That the method of diagnosis, as taught and demonstrated by the professor, chalenges our unbounded confidence and admiration, and we fully believe that in the hands of a skillful practitioner, it cannot fail to detect and locate any disease, and that this alone, if adopted by the medical profession, would prove of incal-

culable value to a suffering world.

Resolved, That those medical practitioners who, in their own estimation, are too wise to learn, and too prejudiced to investigate a new theory, are in our opinion, unworthy of our confidence and patronage, and should be brought under the head of the current of truth, until its radiating and expanding influence upon their contracted minds, shall constrain them to acknowledge that they see light.

Resolved, That we have the fullest confidence in Prof. Wells, as an able and honest expounder of his new theory. That he has a most happy manner of delivery and faculty of illustration, that cannot fail to both interest and instruct all who will listen to him, and that we

believe him to be both a gentleman and a scholar.

Resolved, That we hail this new theory as the great desideratum of the age, and the harbenger of a new era in medical practice, a bright star of hope to many a desponding sufferer.

Resolved, That we tender our warmest thanks to the professor and his estimable lady, for that urbanity, hu-

mane and kindly feeling that uniformly distinguishes them, interwoven with their pupils; and that we commend them to all mankind, but especially to the suffering. In behalf of the class.

J. C. Brainard, Chairman.

J. C. Carr, Esq., Secretary. Columbus, Wis., Jan. 23d, 1862.

FULTON RESOLUTIONS.

At the close of a course of Lectures delivered in our town by Prof. W. R. Wells, on the very important and entertaining subject of Electropathy, the members of the class organized by calling Prof. J. G. Griffin, Principal of Fulton Seminary, to the chair, and Rev. H. W. Titus to act as secretary: Whereupon the following preamble and resolutions were presented by Prof. A. Boothby, and unanimously adopted by the class, and a copy of the same ordered to be presented to Dr. Wells.

Whereas, Prof. W. R. Wells, M. D., has delivered a series of lectures before us, as members of his class, on the subject of electricity as a remedial agent: And whereas, the importance of the sytem of electropathy, considered in the light in which it has been so ably presented to us, deserves our highest commendation, therefore

Resolved, That we have listened with peculiar and increasing interest to the doctor's course of lectures, and that he has presented MAN, both in health and in disease,

in an entirely new aspect.

Resolved, That the professor's theory of disease and cure, is entirely new to us, and we believe to the world, as we have never before seen or heard anything like it; and we believe it is as useful as new, being strictly scientific and rational. The doctor has a happy faculty of illustrating every point, so that if any fail to understand it, it is their own fault, and not his.

Resolved, That the deportment of the professor has been that of a gentleman and scholar, a lucid and thorough instructor, and that we commend him and his accomplished lady to the diseased, and we carnestly commend the professor's theory to the candid investigation of all. In behalf of the class.

J. P. GRIFFIN, Chairman.

H. W. Titus, Secretary. Fulton, February, 1861.

WAMPUN RESOLUTIONS.

At a meeting of Prof. Wells' class, held on Tuesday evening, Dec. 10th, 1861, Mr. E. Barker was called to the chair, and Rev. I. M. Walker was chosen secretary. The object of the meeting was then stated by the Chair, after which Messrs. A. B. Randall, (Chaplain of the Wisconsin State Prison,) I. M. Walker and E. T. Grace, were appointed a committee to draft resolutions expressive of the views of the meeting. The following preamble and resolutions were reported and unanimously adopted.

Whereas, We, the members of Prof. W. R. Wells' class, having attended his course of lectures on electropathy in this place, desire to express our views of the doctor as a scientific lecturer, and our appreciation of his theory of disease and method of cure; therefore

Resolved, That we believe that the doctor's theory of disease is in many respects novel, yet scientific and rational, and much more certain in the diagnosis of disease,

than the previous systems of practice.

Resolved, That in our acquaintance with Prof. Wells, he has shown himself to be a Christian and a gentleman, as well as a scientific man, and that he has the most happy faculty of instructing his classes; and if any one fails to understand him, it is his own fault, and not the professor's.

Resolved. That we commend the professor and his accomplished lady to the confidence of all, but especially to the afflicted invalid; and his new theory of disease and cure to the candid consideration of all.

Resolved. That a eopy of the above resolutions be presented to the editor of the Times for publication, and

also to the professor.

E. Barker, Chairman.

I. M. Walker, Secretary. Wampun, Wis., Dec. 10th, 1861.

SYRACUSE RESOLUTIONS.

After listening to Prof. Wells' course of Lectures, delivered in this city, the members of the class organized by calling A. V. K. Snyder, M. D., to the chair, and Judge G. H. Middleton, Esq., secretary: Whereupon the following preamble and resolutions were unanimously adopted, and a copy ordered to be presented to the Doctor.

Whereas, Prof. W. R. Wells, M. D., has delivered a eourse of lectures before us, as members of his class, on the subject of electricity, as a remedial agent. And whereas, the importance of the system of electropathy, eonsidered in the light in which it has been so ably presented before us, deserves our highest commendation; therefore

Resolved, That we have listened with the deepest interest to the Doetor's course of lectures. His theory of disease and method of cure, are original and highly interesting; also rational and scientific, and wonderfully suceessful in the many cases treated in our city.

A. V. K. SNYDER, Chairman.

G. H. MIDDLETON, Secretary.

WM. H. CHIDDESTER, M. D. E. Andrews, M. D.

Syraeuse, March 25th, 1861.

JANESVILLE RESOLUTIONS.

Whereas, Having attended a course of Lectures by Prof. W. R. Wells, M. D., at the Myers House, in this city, demonstrating that the human body in health is a perfect compound electrical magnet, and that the positive and negative forces are balanced, and that disease consists in a disturbance of the equilibrium of these forces. Therefore

Resolved, That although we commenced listening to these lectures full of doubt, our skepticism was soon removed, and with increasing confidence we have heard the course, and are fully prepared to endorse his system of diagnosis, and also believe that in all chronic diseases, and in many accute diseases, the principles of electropathy, as unfolded by the professor, are the safest, most certain and promptest method of relief and cure; and we feel at a loss to find language to express our high appreciation of his most valuable instruction, and recommend his subject as of great value to the profession and the public.

Resolved, That we are highly pleased with the doctor and lady, for their urbanity, kindness, and interest man-

ifested in imparting information to the class.

G. W. CRITTENDEN, M. D., President. S. P. Cole, M. D., Secretary:—And 44 others. Janesville, Wis., February, 26th, 1862.

The following are a few notices from the many hundreds, which the professor has received from the Press, where he has lectured:—

ELECTROPATH.—Prof. Wells is instructing a large and intelligent class of ladies and gentlemen in our city, in the science of Electricity as applied to the human system. In his class we are glad to notice many of our most respected citizens, and among them, several of the medical profession. Prof. W. has awakened a lively interest in this community, in the science which he has so tho-

roughly mastered. We commend him and his esteemed lady to the confidence and patronage to all lovers of science, and all who desire to become acquainted with the marvelous and beneficent uses of this most subtle of all

elements, electricity.—La Crosse Republican.

ELECTROPATHY.—The Globe Hotel is literally thronged, day and evening, with those of our citizens interested in Dr. Wells' science of cure through the agency of electricity. Hundreds of anxious patients and their friends, come to test his theory of disease, and learn the method of cure. He has a large class under instruction, to whom he is nightly revealing the astonishing secrets of electricity.

We learn by the Syracuse papers, that Prof. Wells, the Electrician, (formerly of our city,) is lecturing in that place. He is the man to succeed.—Buff. Advocate.

Dr. Wells, at the Globe, are attended by a large and interested class. His expositions of the laws of electricity, and their application to diseased organs, are clear and forcible. Many gentlemen think they know all that the Doctor knows on this subject. Some of them are certainly in error, as they will be convinced by hearing his lectures, and witnessing his illustrations.—Syracuse Daily Courier.

Prof. Wells, and Electropathy.—Prof. Wells has been spending a few weeks in our town, demonstrating an entirely new theory of disease, and method of cure. The professor has instructed a large and intelligent class of ladies and gentlemen, who, as will be seen by another column, are highly gratified with both his theory, and the practical workings of it. Such is the anxiety expressed by the citizens of Wampun and vicinity, for a second course of lectures on electropathy, that the professor has consented to remain and deliver another course. The worst of cases, and the most hopeless by other methods of treatment, are readily cured by him.— Wampun Times.



